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## DEPARTMENT OF THE INTERIOR, CANADA

HON. CHARLES STEWART, Minister  
J. D. CRAIG,  
Director General of SurveysW. W. COBY, C.M.G., Deputy Minister  
NOEL J. OGILVIE, Director,  
Geodetic Survey of Canada

## GEODETIC SURVEY OF CANADA

PUBLICATION No. 23

LEVELLINGPRECISE LEVELLING  
IN  
ALBERTABy  
R. H. MONTGOMERYQB  
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LEVELLING

**PRECISE LEVELLING**  
**IN**  
**ALBERTA**

By  
**R. H. MONTGOMERY, D.T.S.**  
CHIEF OF LEVELLING DIVISION



OTTAWA  
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PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1926

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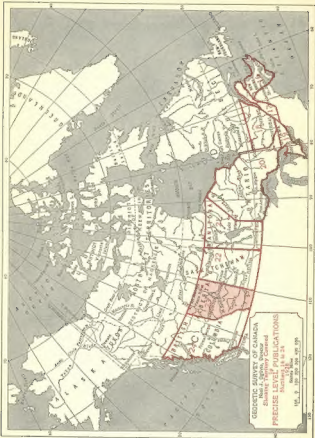
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GEOGRAPHIC SURVEY OF CANADA  
N.W. J. Smith, Director  
Surveying Territory Control  
**PRECISE LEVEL PUBLICATIONS**  
Number 18 to 26  
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1950, p. 100, 200, 300, 400, 500



## PRECISE LEVELLING IN ALBERTA.

### GENERAL.

This publication contains the descriptions and elevations of bench marks established during the running of precise levels in Alberta. These operations were carried on from time to time between the years 1913 and 1925 and comprise 2,871 miles of levelling and have determined the elevations of 771 bench marks. Precise levelling in Alberta up to the year 1925, was carried out by the Geodetic Survey of Canada and by the Topographical Survey, both being branches of the Department of the Interior. In the year named the levelling divisions of the two organizations were amalgamated under the Geodetic Survey.

The results of the levelling done by the Geodetic Survey up to 1924 have been published in bulletins C, D, E, F, G and H, and the results of that done by the Topographical Survey to 1914 in "Report on Levelling Operations." The results of work carried out subsequently to the above dates have not hitherto been printed. It is, therefore, thought advisable to issue in one volume the revised descriptions and elevations of all precise level bench marks in Alberta.

The present publication should be regarded as supplanting all former publications dealing with precise levelling of the Geodetic Survey in this area. The elevations are the result of a general adjustment of the precise level net made in 1928 and may be expected to remain without material change for a number of years.

As it is intended that this publication shall be essentially a field book, every effort has been made in the arrangement of the text and by the adoption of a standardised form of description to present the information in a convenient and accessible form.

Anyone interested in the field procedure of precise levelling can secure all the details of such work in Publication No. 8 of the Geodetic Survey of Canada. The adjustment of the Canadian level net is explained in Publication No. 28. Copies of these publications may be obtained on request from the Director of the Geodetic Survey of Canada, Department of the Interior, Ottawa.

### THE PRECISE LEVEL NET OF CANADA

At the end of the field season of 1928, a total of 23,823 miles of precise levels had been run and 8,128 standard precise bench marks and 67 Fundamental bench marks had been established. Included in these totals are 4,154 miles of precise levels in Manitoba, Saskatchewan and Alberta, which were run by the Topographical Survey, Department of the Interior, prior to the consolidation in 1925 of its levelling division with the levelling division of the Geodetic Survey of Canada. The precise level net is based on mean sea level obtained from five primary tidal stations, namely, Yarmouth and Halifax on the Atlantic coast, Father Point on the Gulf of St. Lawrence and Vancouver and Prince Rupert on the Pacific coast. The actual determination of mean sea level at each of these points was made by the Tidal and Current Division, Canadian Hydrographic Service, Marine Branch, Department of Marine and Fisheries. In the adjustment of the Canadian net it is assumed that "mean sea level" as determined at each of the five tidal stations lies in the same level surface. The evidence derived from the precise levelling connecting the primary tidal stations tends to indicate that this assumption is substantially correct. Along the Great Lakes five of the ninety-four circuits which form the level net of Canada have sections

of their perimeter over water. These water transfers were derived from the records of gauge stations maintained by the Precise Water Level Division, Canadian Hydrographic Service. The portions of the level lines obtained by water transfer received no orthometric correction and were given infinite weight in this adjustment of the Canadian net.

### ADJUSTMENT OF THE PRECISE LEVEL NET

The adjustment of the Precise level net of Canada has been executed in the Division of Precise Levelling Adjustment and Precisions, under the direction of Mr. J. B. Cannon, Chief of Division. The differential method of adjustment employed is an adaptation of the method of least squares to the treatment of geodetic nets. This innovation has the advantage of immediately disclosing the effects of the introduction of new levelling into the net.

### PRECISE LEVELLING IN ALBERTA

Before the amalgamation in 1925 referred to in a previous section, the levelling operations of the Topographical Survey were carried out under the general supervision of Mr. J. N. Wallace. All field work of the Geodetic Survey was carried out under the general supervision of Mr. F. B. Reid. The following table gives the details of the precise level lines in Alberta in the order in which they were run, including the names of the engineers in each case.

Year	From	To	Chief of Party	Mileage
1913	Calgary	Edmonton	L. O. R. Dossie	
1922	Lacombe	"	J. B. Alexander	194
1925	Wetaskiwin	"	L. O. R. Dossie	
1913	Lloydminster	"	L. O. R. Dossie	170
1914	Butte	"	N. H. Smith	165
1925	Tofield	"	L. O. R. Dossie	
1915	Edmonton	Marlboro	N. H. Smith	147
1916	Marlboro	Yellowhead	N. H. Smith	104
1914	Wahle	Coutts	D. McKillan	208
1914	Lethbridge	Crowsnest	G. S. Raley	93
1914	Lethbridge	Calgary	G. S. Raley	137
1915	Stibbald	Rosebud	E. W. Berry	169
1916	Rosebud	Calgary	L. O. R. Dossie	61
1915	Calgary	Stephen	G. S. Raley	123
1915	Calgary	Tofield	N. H. Smith	
1925	Camrose	"	L. O. R. Dossie	202
1916	Edmonton	Slave Lake	E. W. Berry	170
1916	Cardondale	Twende	E. W. Berry	136
1922	Twende	Waterways	J. B. Alexander	147
1919	Medicine Hat	Irricana	A. J. Rainboth	
1925	Bassano	"	L. O. R. Dossie	171
1920	Empress	Binclow	G. S. Raley	17
1919	Binclow	Bassano	A. J. Rainboth	191
1925	Empress	"	E. W. Berry	
1919	Compeer	Lacombe	L. O. R. Dossie	181
1921	Macleod	Aldersley	L. O. R. Dossie	78
1922	Camrose	Wetaskiwin	G. S. Raley	25
1925	Camrose	"	L. O. R. Dossie	
1922	Kerensky	St. Paul des Metis	J. B. Alexander	87
	Total			2,871

Note.—Where a levelled line crosses a provincial boundary, mileage is taken to the boundary. In cases where two or more engineers are shown as operating in different years on the same line it indicates that additional levelling was done after the first running of the line, either to improve the accuracy of the levelling or to establish additional bench marks, or for both purposes.

## INSTRUMENTS AND PRECISION OF LEVELS

Since 1923 levels of both the types shown in the illustrations at the back of this publication have been used on all precise levelling operations conducted by this Survey. Prior to that date levels of the United States Coast and Geodetic Survey pattern only were used.

The levelling rods used on this work were graduated into hundredths of a yard and the intersections of the three wires of the diaphragm of the instrument with the rod divisions were read by estimation to the thousandth of a yard. The sum of these three readings gave the reading of the mean wire in thousandths of a foot. Prior to 1923 the rods were made of wood, specially impregnated with paraffin, and were standardized before and after each field season. If this standardization revealed a change in length of the rod during the season, a rod correction was applied. Since 1923 the invar rod has been used on this work and has entirely removed any necessity for a rod correction. A strip of invar 20 millimetres wide, 2 millimetres thick and 3 metres long, is attached to the face of a supporting wooden rod. The unit graduations, hundredths of yards, are painted on the invar strip while the yards and tenths of yards, are indicated on the face of the wooden rod. An illustration on page 8 shows a section of an invar levelling rod.

Each section approximated one mile in length and was levelled in both a forward and backward direction. A tolerance of  $\pm 0.017 \text{ feet } \sqrt{M}$ , where  $M$  is the length of the section in miles, was allowed for the discrepancy between the difference of elevation ascertained by the two lines. In cases where this limit was exceeded releveling was carried out.

## BENCH MARKS

Prior to 1923, the standard precise bench mark of this Survey was a chisel mark on a  $\frac{1}{2}$ -inch copper bolt, cemented in bedrock, walls of substantial buildings and masonry structures of all kinds. Subsequently a bronze tablet 3 inches in diameter replaced the bolt. Illustrations of the bolt and tablet with their inscriptions are shown on page 8. At certain points concrete bench-mark piers have been built which project from six inches to one foot above ground. In the earlier piers the bolts were placed in the side about nine inches below the top, but since 1917 the bolt or tablet has been placed in the top of the pier. In general the serial number of the bench mark has been stamped on the bolt or tablet, but in no case has the elevation been placed on this type of bench mark. The average distance between standard bench marks is three miles.

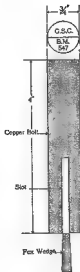
In cases of bench marks established by other organisations, acknowledgment is made in the footnotes and the bench mark is designated with the number assigned to it by that organisation. The elevation is, however, that determined by the Geodetic Survey.

The construction of Fundamental bench marks was inaugurated in 1925 and it is the intention that one of these will ultimately be found in every city and most of the larger towns of the Dominion. These monuments, by their location and conspicuousness, are proving very useful to the public as governing bench marks for the surrounding districts and, through their permanency, will prolong the life of the precise level system. They will have their elevation in feet above mean sea level legibly stamped on them. A diagram of a Fundamental bench mark is shown on page 2.

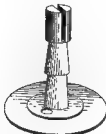
# GEODETIC SURVEY OF CANADA



Detail of lower portion of  
new type of levelling rod



\*Copper Bolt bench mark used  
prior to 1938



Brass Tablet bench mark introduced in the year 1938

\*Topographical Survey bench marks have the letters T.S. stamped in place of G.S.C.

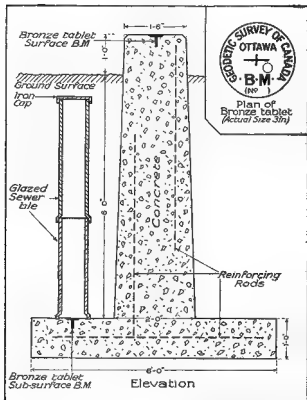


Diagram of Fundamental Bench Marks. Inset—Drawing showing standard tablets. The conspicuous surface mark is intended for the convenience of the public and will have its elevation above sea level eventually shown on the mark itself, in addition to being published. The elevation and description of the subsurface mark will not be published as the main purpose for the establishment of this mark is to secure permanency. It is not intended for public use and when the necessity arises its recovery will be made by officers of the Geodetic Survey.

## INSPECTION OF BENCH MARKS

In 1924 a field investigation of bench marks was inaugurated, commencing at the Atlantic seaboard and continuing westward. From various causes deterioration and destruction of bench marks goes on at a fairly constant rate. This rate is largely dependent on the time elapsing since the establishment of the bench marks. Inspection has revealed that the loss within five years since establishment is negligible; the loss between five and ten years 4 per cent; between ten and fifteen years it has risen to 13 per cent and over fifteen years to 29 per cent. During the inspection of the bench marks the descriptions were carefully viewed on the ground so as to allow for the changes brought about by time. In cases where a bench mark was listed in earlier publications but does not appear in this publication it may be assumed that the bench mark has been destroyed. If any engineer should find that a bench mark which is listed in this publication has been destroyed he is requested to advise the Director of the Geodetic Survey.

## ELEVATIONS

All the elevations are given in feet above mean sea level. The elevation of a bench mark in this publication will be found in general to differ by a fraction of a foot from its heretofore published elevation. So far as the requirements of the engineering profession are concerned the changes in the difference of elevation between two adjacent bench marks will be in general quite unappreciable, as the correction is of the nature of a change of datum. The exceptional cases are restricted to bench marks at junction points for which two elevations had formerly been published.

While the results of the revision of precise level lines indicate a local disturbance of bench marks in some instances and seismic changes are appreciable in certain districts yet the general correction just mentioned is mainly accounted for by two causes. These are the substitution of adjusted values for the instrumental values which have hitherto been published and the application of the orthometric correction to the difference in elevation between bench marks.

When precise leveling in Canada was started more than twenty years ago, it was manifestly impossible to publish adjusted values although such values are superior to the observed instrumental values as they represent the composite mean of all instrumental determinations. It was not however until 1916 that the first Canadian transcontinental line of precise levels was computed. Accordingly unadjusted instrumental values for the elevations of bench marks were retained as soon as available after the field operations and these values have been maintained up to the present. Now however adjusted values, resulting from a simultaneous adjustment of the entire precise level net of Canada are being published for the first time. The average effect of the adjustment has applied a correction to the observed differences of elevation of less than one thousandth of a foot per mile.

The rounding of adjusted values removes all existing discordances, such as two elevations for a bench mark at a junction point, a condition which is inevitable when dealing with unadjusted instrumental values.

The application of the orthometric correction, the second main cause, is for the purpose of eliminating from the observed results the effect of the convergence of level surfaces as the altitude increases. The elevations in this publication as a result of this correction represent the vertical distances from the surfaces of the geoid. The elevations of junction bench marks of the precise level net with the orthometric correction applied to all lines—water as well as land—have been noted in Publication No. 28 of this Survey.

## ARRANGEMENT OF DATA

The text is prepared in dictionary form with the descriptions and elevations of bench marks tabulated under the name of the nearest railway station. The railway stations are listed in alphabetical order with a suitable cross reference inserted wherever it was deemed advisable. This arrangement is a radical departure from the orthodox form of all former publications of precise levelling and entirely obviates the necessity of appending the usual index. It permits the segregation of all bench marks in the vicinity of large centres of population and this innovation, it is felt, will be appreciated by engineers and surveyors as their requirements of such data are essentially confined to local areas.

## RAILWAY STATIONS, ROAD CROSSINGS AND STREAMS

In addition to the bench marks given in this publication the elevations of the railway stations and diamond crossings have been recorded along all levelling lines. Further the elevations of the numerous road crossings and of nearly all streams and junction switches have been taken along the lines from Hobbald to Hanna and Calgary from Coomes to Coronation and Lacombe, from Lloydminster to Edmonton from Macleod to Aldersyde from Calgary to Lacombe and Edmonton, from Kerensky to St. Paul des Metis from Tweedie to Waterways, and from Edmonton to Slave Lake. The elevations of these features which are very numerous can be obtained on request by stating which particular line is desired.

## DESCRIPTION OF BENCH MARKS

Bench marks were formerly published in lists following the course of some particular railway line. This involved descriptions which were not always convenient when a bench mark was approached by way of a highway. The great advance in motor transport and improvement in highways have resulted in roads being used to reach a bench mark to a much greater extent than formerly. The descriptions are now drawn up in such a way as will serve an approach either by railway or by road. Certain forms and conventions have been adopted to meet the changed conditions. The general direction of a line joining the nearest railway station to a bench mark is given to the nearest eighth point of the compass and is not necessarily the direction of the railway at the station. The bearing of the face of the supporting structure which contains the bench mark is also stated within the same limits. In all other cases, where direction is used in the description of a bench mark, only the nearest cardinal points are used. The stated distance between a bench mark and its reference railway station is the distance measured along the railway which leads to the bench mark.

Where bridges and culverts are mentioned in these descriptions it is understood that such are railway bridges and railway culverts, unless there is a specific statement to the contrary.

For the sake of brevity, the Canadian National Railway, Canadian Pacific Railway and the Northern Alberta Railway are referred to as C.N.Ry., C.P.Ry. and N.A.Ry., respectively.

## INDEX MAP

At the back of the publication will be found a map of the province of Alberta, on which is indicated the location of the lines of precise levels in this area. By consulting this map one is enabled to see at a glance the extent of the levelling carried out and the districts into which it has been extended.





# DESCRIPTIONS AND ELEVATIONS OF PRECISE LEVEL BENCH MARKS IN ALBERTA

*Note.*—The description of each precise level bench mark with its elevation is listed under the name of its nearest railway station.

**Abou,** N A Ry. Concrete bench-mark pier  $1\frac{1}{2}$  miles northeast of station and 13 feet south of eighteenth pole south of mile post 48 from Carletondale, 480 feet north of north side sign and 5 feet west of easterly limit of right of way, tablet in top of pier No. V-13. Elevation 2180.569.

Concrete bench-mark pier 2 $\frac{1}{2}$  miles southwest of station and at third pole south of mile post 44 from Carletondale, 75 feet south of a whistle post for northbound trains, 1,300 feet southerly from road allowance along east boundary of sec. 27-60-61 and 3 feet west of easterly limit of right of way, bolt set vertically. No. V-12. Elevation 2139.683.

**Acheson,** C N Ry. Concrete bench-mark pier  $1\frac{1}{2}$  miles east of station and 34 feet east of sixteenth pole west of mile post 12 from Edmononton, 30 feet west of a whistle post for southbound trains, 1,275 feet easterly from road allowance along east boundary of sec. 3-53-26 and 4 feet south of northerly limit of right of way, bolt set horizontally in north side of pier No. 63-B. Elevation 2316.604.

**Airdrie,** C P Ry. Plate girder bridge over Nose creek, 475 feet north of station, tablet in bridge west of south concrete abutment, 5 inches from east edge and 5 inches from north edge. No. H-10. Elevation 3549.023.

Thouche concrete box culvert, 2 $\frac{1}{2}$  miles north of station and at mileage 21.9 from Twelfth street east Calgary, tablet in top of coping on east end of culvert, 2 feet 6 inches from north end of coping. No. H-11. Elevation 2659.302.

**Alcomdale,** N A Ry. Concrete bench-mark pier, 42 feet northwest of north-west wall of station, 240 feet northerly from road allowance along north boundary of sec. 32-36-26 and 3 feet east of westerly limit of right of way, tablet in top of pier No. 1-9. Elevation 2350.153.

**Alderson,** C P Ry. Station in southwest or rear concrete foundation wall, 7 feet northwest of cellar doorway and 1 foot below woodwork, bolt set horizontally. No. 324-D. Elevation 2501.616.

Concrete bench-mark pier, 3 miles northwest of station and at mileage 27.8 from Medicine Hat, 20 feet northerly from road allowance along north boundary of sec. 36-15-11 and 5 feet east of westerly limit of right of way, bolt set vertically. No. 323-D. Elevation 2467.363.

Concrete bench-mark pier,  $4\frac{1}{2}$  miles southeast of station and at mileage 30.7 from Medicine Hat, 230 feet westerly from road allowance along east boundary of sec. 11-15-10 and 6 feet south of northerly limit of right of way, bolt set vertically. No. 325-D. Elevation 2478.729.

**Alfonsvde,** C P Ry. Concrete bench-mark pier  $1\frac{1}{2}$  miles southeast of station, 187 feet east of bridge over Highwood river and 7 feet north of southerly limit of right of way, bolt set horizontally in northwest side of pier No. 61-D. Elevation 3391.188.

**Alh,** Fundamental bench mark about 1 mile east of C N Ry. station, on surveyed road through centre of sec. 31-36-23 near southeast limit of road, 300 feet east of post and pits marking first change of direction of the road east of C N Ry., tablet in top of pier No. 63-F-2. Elevation 2606.663.

**Alta—Concluded**

Signal tower at C P Ry-C N Ry diamond crossing,  $\frac{1}{2}$  mile northeast of C N Ry station, in northwest concrete foundation wall, 14 inches from northerly corner and 1 foot below woodwork bolt set horizontally No. 62-F Elevation 2608 646

Concrete bench-mark pier, 4 miles southeast of C P Ry station and 55 feet east of first pole east of mile post 76 from Coronation, 1,375 feet westerly from road allowance along east boundary of sec 21 39-22 and 3 feet north of southerly limit of right of way, tablet in top of pier No Z-7. Elevation 2626 619.

Dismantled Canadian Northern Ry bridge over Calgary-Tofield line,  $\frac{1}{2}$  mile south of C N Ry station, in northerly concrete footing of the two \* which are immediately east of track, bolt set horizontally in southwest face, 4 inches from westerly corner and 3 inches below top No 61-E Elevation 2621-341.

Concrete bench-mark pier 2 miles northwest of C P Ry station and 75 feet west of eighth pole east of mile post 82 from Coronation, 210 feet westerly from road allowance along east boundary of sec 3-40-23 and 3 feet south of northerly limit of right of way, tablet in top of pier No Z-6. Elevation 2610 317.

**Altona, C N Ry** Concrete bench-mark pier, 1 mile east of station and 30 feet west of seventh pole west of mile post 126 from Kindersley, 300 feet east of east mile sign 907 feet westerly from road allowance along east boundary of sec 13-31-13 and 2 feet south of northerly limit of right of way tablet in top of pier No 8-106 Elevation 2641 076

**Alton, N A Ry** Concrete bench-mark pier, 390 feet south of south switch, 24 feet south of fifteenth pole south of mile post 59 from Carbondale and 10 feet west of easterly limit of right of way, tablet in top of pier No V-16. Elevation 2222 291

Concrete bench-mark pier 4 miles north of south switch and 76 feet south of fourteenth pole south of mile post 63 from Carbondale, on top of a shallow cut with a fill extending north and south from it, 46 feet east of track tablet in top of pier No V-17 Elevation 2190 367

**Altario, C P Ry** Concrete bench-mark pier, 2 $\frac{1}{2}$  miles southeast of station and 10 feet north of second pole north of mile post 49 from Kerrobert or of thirteenth pole north of north boundary of sec 5-34-1, 2 feet east of westerly limit of right of way, bolt set vertically No Z-44 Elevation 2342 841

Concrete bench-mark pier 1 mile west of station and 90 feet east of mile post 53 from Kerrobert, 1,350 feet easterly from road allowance along east boundary of sec 15-34-2 and 3 feet north of southerly limit of right of way bolt set vertically No Z-43 Elevation 2375 917

**Ansell, C N Ry** Dismantled bridge by which Grand Trunk Pacific Ry used to cross Canadian Northern Ry, 2 miles west of station and immediately north of present C N Ry line at mileage 6.3 from Edson in north face of north concrete retaining wall at east end of bridge, 4 feet 6 inches from east end of wall and 19 inches below top, bolt set horizontally No 83-H Elevation 3062 381

**Anthracite, C P Ry** Triple concrete culvert, 1 mile southeast of station and at mileage 76.2 from Calgary, in southeast face of south facewall, 6 inches below top, bolt set horizontally No. 238-C Elevation 4453 791

\*This footing is now covered with earth but may be located by means of two anchor bolts which project above the ground.

Plate girder bridge, 4 miles southeast of station and at mileage 73.1 from Calgary, in north end of northwest face of east concrete abutment, 2 feet 7 inches above bridge seat, bolt set horizontally No 237-C Elevation 4371 814.

**Anzac;** C N Ry Concrete bench-mark pier 1½ miles southeast of south switch and 12 feet south of second pole north of mile post 250 from Cardendale, 1,320 feet southerly from north boundary of sec 3-26-7 and 31 feet of east of track, bolt set vertically No A-71 Elevation 1599 427

**Ardmore;** C N Ry Concrete bench-mark pier 2½ miles east of station and 20 feet east of ninth pole west of mile post 100 from Hanna 90 feet west of a whistle post for westbound trains 445 feet east of a trestle over Nervensberry creek the farther east of two trestles about 100 feet apart, 1,465 feet easterly from road allowance along east boundary of sec 23-25-25 and 2 feet south of northerly limit of right of way, tablet in top of pier No. B-152. Elevation 2952 160

Concrete bench-mark pier 1½ miles southwest of station and 57 feet east of thirteenth pole west of mile post 104 from Hanna, 2 feet north of southerly limit of right of way, tablet on top of pier No 8-153 Elevation 3040 011

Concrete box culvert, 3 miles west of station and at mileage 105.9 from Hanna 404 feet easterly from road allowance along east boundary of sec 13-25-26 in north end of culvert, bolt set vertically, 7 inches from east end of coping No B 154 Elevation 3067 815

**Ardley;** C N Ry Concrete bench-mark pier 2½ miles north of station and 3 feet north of second pole north of mile post 14 from Murter 1½ miles south of bridge over Red Deer river 500 feet southerly from road allowance along north boundary of sec 20-32-23 and 3 feet east of westerly limit of right of way bolt set horizontally in north side of pier No 60-F Elevation 2684 879.

**Ardsman;** C N Ry Section house, 300 feet northwest of northwest switch of passing track tablet in southeast concrete foundation wall, 2 feet 8 inches from easterly corner and 3 inches below woodwork No. 55-H-2. Elevation 2336 566.

**Ashmont;** C N Ry Water tank 2½ miles east of station, in face of concrete foundation parallel and nearest to track, 5 feet 3 inches east of the spout and 7 inches below woodwork, bolt set horizontally No DD-23 Elevation 2117 739.

Concrete bench-mark pier 3½ miles southeast of station and 33 feet east of mile post 104 from St. Paul Junction, 370 feet westerly from road allowance along east boundary of sec 24-59-11 and 4 feet south of northerly limit of right of way bolt set vertically No DD-23 Elevation 2112 829.

Concrete bench-mark pier 1 mile west of station and 10 feet east of sixth pole west of mile post 104 from St. Paul Junction, 115 feet west of west mile sign 2,358 feet westerly from road allowance along east boundary of sec 28-59-11 and 3 feet south of northerly limit of right of way, bolt set vertically No DD-21 Elevation 2128 308.

**Atlas;** C P Ry Public school, in centre of east concrete foundation wall; bolt set horizontally, 14 inches below woodwork. No 234-D. Elevation 2558 058.

Concrete bench-mark pier, 1½ miles west of station and at mileage 66.4 from Empress, 300 feet westerly from road allowance along east boundary of sec 1-22-8 and 7 feet south of northerly limit of right of way, bolt set vertically No 253-D Elevation 2517 781

\*This bench mark was not found during the inspection of 1908.

**Balntrree; C N Ry** Concrete bench-mark pier, 1 mile east of station and 15 feet east of nineteenth pole west of mile post 92 from Hanna, 352 feet west of east mile sign, 62 feet east of a private crossing, 860 feet east of trestle over Serviceberry creek and 2 feet south of northerly limit of right of way, tablet in top of pier No. 8-150 Elevation 2929 562

Concrete arch culvert,  $2\frac{1}{2}$  miles northeast of station and at mileage 90 75 from Hanna, in top of coping on west end of culvert 10 inches from north end of same, bolt set vertically No. 8-149 Elevation 2900 807

Concrete bench-mark pier  $2\frac{1}{2}$  miles southwest of station and 60 feet north of ninth pole south of mile post 96 from Hanna, 975 feet north of C P R -4' N R diamond crossing, 1,800 feet northerly from road allowance along north boundary of sec. 21-25-24 and 2 feet east of westerly limit of right of way bolt set vertically No. 8-151 Elevation 2910 402

**Balsac; C P Ry** Concrete arch culvert,  $\frac{1}{2}$  mile south of station and 40 feet north of mile post 13 from Twelfth street east, Calgary, tablet in top of coping on east end of culvert, 18 inches from north end of coping No. H-9. Elevation 3529 708.

**Banff; C P Ry** Public school, west wall in west face of concrete sill of fifth basement window south of northerly entrance, bolt set horizontally No. 241-C. Elevation 4540 943

Plate girder bridge immediately west of station, in north end of west face of east concrete abutment, 21 inches above bridge seat, bolt set horizontally No. 240-C. Elevation 4531 365.

**Banxhead; C P Ry** Steel truss bridge over Cascade river,  $1\frac{1}{2}$  miles east of station and at mileage 78 3 from Calgary, in south face of east stone abutment, first course below bridge seat, bolt set horizontally No. 239-C. Elevation 4543 098.

**Bantry; C P Ry** Concrete bench-mark pier, 1 mile northwest of station and between third and fourth poles east of mile post 60 from Medicine Hat, 135 feet west of a whistle post for eastbound trains and 5 feet south of northerly limit of right of way bolt set vertically No. 318D Elevation 2506 029.

**Bardo; C N Ry** Pioneer Grain Company's elevator tablet in north concrete foundation wall 18 inches from northeast corner and 8 inches below metal sheathing No. 75-F-2. Elevation 2401 195

Concrete bench-mark pier,  $1\frac{1}{2}$  miles south of station and 36 feet north of first pole south of mile post 7 from Tobfield, 135 feet southerly from road allowance along north boundary of sec. 34-49-19 and 8 feet east of westerly limit of right of way, bolt set horizontally in north side of pier No. 75-F. Elevation 2384 611

**Barlow; C N Ry** See Barlow Junction, B M No. 8-172.

**Barlow Junction; C N Ry** Steel truss bridge over C P Ry irrigation canal,  $\frac{1}{2}$  mile west of station and at mileage 132 8 from Hanna, in top of south concrete retaining wall at east end of bridge 22 inches from east end of wall, bolt set vertically No. 8-172. Elevation 3409 555

Plate girder bridge over Bow river,  $1\frac{1}{2}$  miles west of station and at mileage 133 4 from Hanna, in top of south concrete retaining wall at east end of bridge, bolt set vertically directly above south end of abutment. No. 8-173. Elevation 3399 063.

**Barnegat; N A Ry** Concrete bench-mark pier,  $\frac{1}{2}$  mile north of station and 30 feet south of sixth pole north of mile post 122 from Carbondale, 660 feet south of mile sign,  $\frac{1}{2}$  mile southerly from road allowance along east boundary of sec. 24-07-13 and 3 feet west of easterly limit of right of way, tablet in top of pier No. V-34. Elevation 1830 920.

Concrete bench-mark pier  $2\frac{1}{2}$  miles west of station and 67 feet west of eighth pole west of mile post 119 from Carbondale, near the middle of a curve.  $\frac{1}{2}$  mile easterly from road allowance along east boundary of sec. 11-67-13 and 4 feet south of northerly limit of right of way, tablet in top of pier No. V-23. Elevation 1870 853.

**Berawell;** C P Ry Concrete box culvert carrying irrigation ditch under railway, 4 miles west of station and at mileage 85.7 from Deansboro, 360 feet easterly from a road crossing in centre of south face, 9 inches below top; bolt set horizontally No. 199-4. Elevation 2730 060.

**Berens;** C P Ry Section house, 600 feet north of station in east or front concrete foundation wall 10 feet from northeast corner and 7 inches below woodwork, bolt set horizontally No. 76-D. Elevation 3152 503.

Public school, in south concrete foundation wall of westerly section, 5 feet from southwest corner and 21 inches below brickwork, bolt set horizontally. No. 77-D. Elevation 3157-217.

**Beshaw;** C N Ry Alberta Poul elevator, in west concrete foundation wall, 7 inches from southwest corner and 21 inches below metal sheathing, bolt set horizontally No. 65-F. Elevation 2601 352.

Concrete bench-mark pier  $4\frac{1}{2}$  miles southwest of station and at ninth pole south of mile post 67 from Telford or fifteenth pole north of road allowance along north boundary of sec. 12-41-22, 4 feet east of westerly limit of right of way, bolt set horizontally in north side of pier No. 64-F. Elevation 2630 287.

**Besseno;** C P Ry Fundamental bench mark in the eastern outskirts of the town, 4 feet west of east limit of road allowance along east boundary of sec. 17-21-18, which is the first road crossing the railway east of station. The pier is 1,227 feet north of northerly limit of right of way and 1,704 feet south of northeast section corner, tablet in top of pier No. 307-D-2. Elevation 2607 346.

Post office, north side wall, in first plaster from northwest corner, bolt set horizontally in third course of stonework below water table. No. 308-D. Elevation 2600 794.

Plate girder bridge over irrigation canal, 1 mile east of station and at mileage 117.5 from Empress, in north face of west concrete abutment, 8 feet above bridge seat, bolt set horizontally No. 307-D. Elevation 2602 835.

Concrete bench-mark pier 5 miles southeast of station and at mileage 93.5 from Medicine Hat, 12 feet westerly from road allowance along north boundary of sec. 36-20-18 and 6 feet north of southerly limit of right of way, bolt set vertically No. 308-D. Elevation 2566 811.

**Battle;** C N Ry See Camrose, B.M. No. 69-F-3, and Duhamel, B.M. No. 69-F.

**Beaupreaw;** C P Ry Concrete box culvert,  $1\frac{1}{2}$  miles southeast of station and at mileage 12.3 from Calgary, at a gravel washing plant, in west end of south face of culvert, 10 inches below top, bolt set horizontally. No. 230-C. Elevation 3595 097.

**Beaverhill;** C N Ry See Bruderheim, B.M. No. L-10.

**Buddington;** C P Ry Boulder, 8 feet by 10 feet, at easterly limit of right of way  $3\frac{1}{2}$  miles south of station, 20 feet south of fourth pole north of mile post 5 from Twelfth street east, Calgary, and 1,150 feet north of Calgary-Edmonton highway crossing, top of broken shank of tablet set vertically in top of rock, 6 inches west of easterly fence of right of way. No. H-4. Elevation 3440 271.

**Behan; N A Ry** Concrete bench-mark pier 2½ miles northeast of north switch and 10 feet north of first pole south of mile post 164 from Carbondale, 1,120 feet southerly from north boundary of sec 173-10 and 41 feet west of track, bolt set vertically. No. V-45. Elevation 2162 367.

Concrete bench-mark pier 1½ mile southwest of south switch, 10 feet north of mile post 160 from Carbondale and 44 feet east of track, bolt set vertically. No. V-44. Elevation 2193 343.

**Behrker; C N Ry** Bridge over C P Ry, 2½ miles southwest of C N Ry station and at mileage 94.5 from Mirror in north face of west concrete abutment, 18 inches from west face and 2 feet 9 inches below C N Ry track level, bolt set horizontally. No. 47-B. Elevation 3033 624.

**Belle; C N Ry** United church, about 400 feet west of station and 800 feet north of railway, in east concrete foundation wall, 18 feet from northeast corner and 2 feet 1 inch below woodwork, bolt set horizontally. No. DD-14. Elevation 2194 269.

Concrete bench-mark pier 2 miles east of station and 15 feet east of third pole west of mile post 82 from St. Paul Junction, 580 feet westerly from road allowance along east boundary of sec 25-29-15 and 3 feet south of northerly limit of right of way, bolt set vertically. No. DD-15. Elevation 2232 391.

Concrete bench-mark pier 2 miles west of station and 15 feet east of fifth pole west of mile post 78 from St. Paul Junction, 320 feet easterly from road allowance along east boundary of sec 32-59-15 and 2 feet south of northerly limit of right of way, bolt set vertically. No. DD-13. Elevation 2154 729.

**Benton; C N Ry** Concrete bench-mark pier, 1 mile west of station and 25 feet east of third pole east of mile post 62 from Kindersley, 106 feet west of west mile sign, 1,140 feet easterly from road allowance along east boundary of sec 32-27-3 and 1 foot south of northerly limit of right of way, tablet in top of pier. No. S-84. Elevation 2463 961.

Concrete bench-mark pier 3 miles northeast of station and 17 feet west of fifth pole east of mile post 58 from Kindersley, 2,030 feet westerly from road allowance along east boundary of sec 12-28-3 and 2 feet north of southerly limit of right of way, tablet in top of pier. No. M-82. Elevation 2444 603.

**Beymon; C N Ry** Concrete bench-mark pier, 1½ miles northeast of station and 11 feet east of fourth pole east of mile post 67 from Hanna, 445 feet west of trestle over Klugebud river, 214 feet east of a whistle post for east-bound trains and 2 feet south of northerly limit of right of way, tablet in top of pier. No. M-137. Elevation 2387 449.

Concrete bench-mark pier 2½ miles west of station and 2 feet south of northerly limit of right of way, tablet in top of pier. No. S-138. Elevation 2484 062.

**Richardson; C N Ry** Concrete bench-mark pier, 2½ miles west of station and 330 feet west of mile post 12 from Edson, 320 feet east of a jog in right of way fence, 48 feet south of track and at the west end of a long clay cut, bolt set horizontally in north side of pier. No. 84-H. Elevation 3164 207.

**Rinos; N A Ry** See Venice. B.M. No. V-28.

**Rindloss; C P Ry** Concrete bench-mark pier, 1½ miles east of station and 200 feet west of mile post 12 from Empress, near the middle of a curve and 3 feet south of northerly limit of right of way, bolt set vertically. No. 203-D. Elevation 2112 630.

\*This bench mark was not found during the inspection of 1938.

Concrete bench-mark pier,  $3\frac{1}{2}$  miles southwest of station and at mileage 16.7 from Empress, at the north end of a long deep clay cut and 4 feet east of westerly limit of right of way, bolt set vertically No. 361-D Elevation 2101.773.

**Bircham;** C. N. Ry. See Grainger, B. M. No. 49-F.

**Bissell;** C. N. Ry. See Union Junction, B. M. No. U-1, and Acheson, B. M. No. 63-H.

**Bittern Lake;** C. P. Ry. Concrete bench-mark pier,  $2\frac{1}{2}$  miles east of station and 10 feet east of first pole east of mile post 78 from Hardisty, 585 feet westerly from road allowance along east boundary of sec. 32-46-21 and 3 feet south of northerly limit of right of way, bolt set vertically No. 675-C. Elevation 2455.057.

Concrete bench-mark pier, 2 miles southwest of station and 23 feet east of fifth pole west of mile post 82 from Hardisty, 156 feet easterly from road allowance along east boundary of sec. 27-46-22 and 3 feet north of southerly limit of right of way, bolt set vertically No. 676-C. Elevation 2442.830.

**Blackfalds;** C. P. Ry. Concrete box culvert,  $5\frac{1}{2}$  miles south of station and at mileage 6.2 from Red Deer, tablet in top of coping on east end of culvert, 5 inches from north end of coping No. H-30. Elevation 2680.923.

Plate girder bridge over Hindman river,  $2\frac{1}{2}$  miles south of station and at mileage 9.3 from Red Deer, tablet in bridge seat of south concrete abutment, 3 feet 10 inches from west edge and 1 foot from north edge No. H-31. Elevation 2782.965.

**Blackfoot;** C. N. Ry. Concrete bench-mark pier,  $\frac{1}{2}$  mile west of station and midway between sixth and tenth poles east of mile post 92 from North Battleford, 290 feet westerly from road allowance along east boundary of sec. 2-50-2 and 4 feet north of southerly limit of right of way, tablet in top of pier. No. L-46. Elevation 2222.758.

Concrete bench-mark pier, 2100 feet east of Lloydminster station and 45 feet west of mile post 84 from North Battleford, 105 feet west of west switch of an elevator track and 3 feet north of southerly limit of right of way, tablet in top of pier No. L-45. Elevation 2109.183.

Concrete pier, 2 feet 6 inches square and standing 4 feet above ground (constructed for astronomical observations), 700 feet west of Lloydminster station and 60 feet south of track, top of pier at southeast corner, unmarked. No. B-3. Elevation 2125.268.

**Blackie;** C. P. Ry. Public school, in concrete foundation of north side wall of front section of building, 2 feet from northeast corner and 15 inches below woodwork, bolt set horizontally No. 62-D. Elevation 3354.569.

Concrete bench-mark pier, 3 miles northwest of station and 65 feet west of fifteenth pole west of mile post 75 from Kipp, 205 feet easterly from road allowance along north boundary of sec. 21-19-27 and 7 feet north of southerly limit of right of way, bolt set horizontally in northwest side of pier. No. 62-D. Elevation 3349.523.

**Blairmore;** C. P. Ry. Plate girder bridge over Lyon creek,  $\frac{1}{2}$  mile east of station and at mileage 87.8 from Lethbridge, in north face of east concrete abutment, 22 inches below bridge seat, bolt set horizontally No. 108-D. Elevation 4223.750.

**Dun Accord, N A Ry** Concrete bench-mark post  $\frac{1}{2}$  mile southwest of station and 20 feet south of thirteenth pole south of mile post 8 from C. atforddale, 1,220 feet southerly from road allowance along east boundary of sec. 12-50-24 opposite a whistle post and 3 feet east of westerly limit of right of way, bolt set vertically. No. V 2. Elevation 2294.864.

**Donar, C. N Ry** Concrete bench-mark post  $\frac{1}{2}$  mile northeast of east switch and 12 feet north of fifth pole south of mile post 130 from Kenderdy, 40 feet south of road sign 2,380 feet southerly from road allowance along north boundary of sec. 9-31-11 and 2 feet east of westerly limit of right of way. Tablet in top of post. No. N-107. Elevation 2716.196.

**Dondos, N A Ry** Concrete bench-mark post 1 mile east of station and 34 feet east of first pole east of mile post 78 from C. atforddale, 1,340 feet southerly from road allowance along east boundary of sec. 5-65-18 and 4 feet north of northerly limit of right of way. Tablet in top of post. No. V 21. Elevation 2046.090.

Concrete bench-mark post  $\frac{4}{5}$  miles northeast of station, 20 feet east of twelfth pole west of mile post 83 from C. atforddale and 49 feet south of track. Bolt set vertically. No. V 22. Elevation 2020.101.

**Dorradale, C. N Ry** Concrete bench-mark post 900 feet east of station and opposite second pole west of mile post 117 from North Battleford, 430 feet east of east switch of passing-track and 4 feet north of southerly limit of right of way. Tablet in top of post. No. J 19. Elevation 283.298.

Iron pipe filled with concrete  $\frac{1}{2}$  mile east of station and 10 feet west of third pole east of mile post 117 from North Battleford, 465 feet southerly from road allowance along east boundary of sec. 29-50-1 and 33 feet north of track. Bolt set vertically. No. L-36. Elevation 2038.447.

Iron pipe filled with concrete  $\frac{3}{4}$  mile northeast of station and 35 feet west of sixth pole east of mile post 114 from North Battleford, 410 feet southerly from road allowance along north boundary of sec. 15-50-6 and 3 feet north of southerly limit of right of way, bolt set vertically. No. L-48. Elevation 2004.431.

Concrete bench-mark post 70 feet west of west switch of passing-track and midway between fourteenth and fifteenth poles east of mile post 118 from North Battleford, 4 feet south of northerly limit of right of way. Tablet in top of post. No. J 37. Elevation 2042.640.

Iron pipe filled with concrete  $\frac{2}{5}$  mile west of station and 30 feet east of seventh pole east of mile post 120 from North Battleford, 1,260 feet east of a whistle post for westbound trains and 3 feet south of northerly limit of right of way. Bolt set vertically. No. L-36. Elevation 2028.054.

**Dotha, C. P Ry** Bank of Montreal in north concrete foundation wall, 1 foot from northwest corner and 2 feet 2 inches below sidewalk, bolt set horizontally. No. Z-14. Elevation 2644.451.

**Douden, C. P Ry** Public school in stone foundation of north side wall, 12 inches from northwest corner and 2 feet 6 inches below brickwork, bolt set horizontally. No. H 22. Elevation 2287.448.

Double concrete box culvert  $\frac{1}{2}$  mile south of station and at mileage 68.5 from Twelfth street east, Calgary, tablet in top of coping on east end of culvert 8 inches from south end of coping. No. H 21. Elevation 2234.103.

**Duvall, C. P Ry** Public school, in concrete foundation of northeast side wall, midway between two basement windows and 18 inches below sidewalk, bolt set horizontally. No. 329-D. Elevation 2301.450.



Concrete bench-mark pier 3 miles southeast of station and at mileage 11.7 from Medicine Hat, 22 feet easterly from road allowance along east boundary of sec. 33-13-7 and 6 feet north of westerly limit of right of way, bolt set vertically. No. 330-1-D. Elevation 2530.616.

Concrete bench-mark pier  $5\frac{1}{2}$  miles northwest of station and opposite east switch of branch passing track, at first pole east of mile post 20 from Medicine Hat and 6 feet north of westerly limit of right of way, bolt set vertically. No. 328-1-D. Elevation 2452.011.

**Box Island, C. P. Ry.** Concrete arch culvert  $\frac{1}{2}$  mile east of station and at mileage 40.3 from Danmore, the farther end of two culverts, in south face of culvert immediately above west wing-wall bolt set horizontally. No. 178-C. Elevation 2507.587.

**Boyle, N. A. Ry.** Concrete bench-mark pier 3 miles northeast of station and 60 feet west of thirteenth pole west of mile post 75 from Carbondale, 270 feet west of a private crossing,  $\frac{1}{2}$  mile easterly from east boundary of sec. 10-55-19 and 4 feet north of westerly limit of right of way tablet in top of pier. No. V-20. Elevation 2079.407.

**Brent, C. P. Ry.** Station in southwest or rear concrete foundation wall, 2 feet 9 inches from southerly corner and 7 inches below woodwork, bolt set horizontally. No. 65-D. Elevation 3268.344.

Concrete bench-mark pier 2 $\frac{1}{2}$  miles northwest of station, and 10 feet north of twelfth pole south of mile post 98 from Kipp, 10 feet northerly from road allowance along north boundary of sec. 20-18-26 and 8 feet east of westerly limit of right of way, bolt set horizontally in north side of pier. No. 64-D. Elevation 3301.130.

**Bromner, C. N. Ry.** Concrete bench-mark pier, 1 mile southeast of station and at twelfth pole west of mile post 112 from Wainwright, 630 feet east of a trestle and 5 feet south of northerly limit of right of way tablet in top of pier. No. 55-H-3. Elevation 2272.829.

Concrete bench-mark pier 4 miles northwest of station, and 25 feet west of tenth pole west of mile post 116 from Wainwright, 108 feet east of a private crossing and 62 feet south of northerly limit of right of way (in line with telegraph poles). Bolt set horizontally in northeast side of pier. No. 56-H. Elevation 2311.282.

**Brickburn, C. P. Ry.** See Robertson, B. M. No. 219-C.

**Brocket, C. P. Ry.** Steel trestle bridge over Pincher creek,  $1\frac{1}{2}$  mile west of station and at mileage 53.7 from Lethbridge, in north end of east face of west concrete abutment, 2 feet 2 inches above bridge seat, bolt set horizontally. No. 93-D. Elevation 3505.800.

**Brooks, C. P. Ry.** Concrete box culvert, 2 $\frac{1}{2}$  miles southeast of station and at mileage 84.6 from Medicine Hat, 365 feet easterly from road crossing, in centre of northeast face 2 feet below top, bolt set horizontally. No. 314-D. Elevation 2447.974.

Inverted siphon carrying "Brooks Aqueduct" under railway,  $3\frac{1}{2}$  miles southeast of station in north face of concrete wall of siphon, on south side of track bolt set horizontally 35 feet from track 15 inches above ground and 10 inches below a small moulding. No. 317-1-D. Elevation 2479.918.

Small concrete arch culvert  $\frac{1}{2}$  mile west of station and at mileage 67.6 from Medicine Hat, in west face of south face-wall 10 inches below top, bolt set horizontally. No. 315-1-D. Elevation 2484.584.

Highway bridge over irrigation canal  $4\frac{1}{2}$  miles west of station and opposite second pole west of mile post 71 from Medicine Hat, 100 yards south of the railway, in west face of north concrete abutment, 8 inches below bridge seat, bolt set horizontally. No. 314-D. Elevation 2543.006.

**Bruce;** C N Ry Security elevator, in southwest concrete foundation wall, 17 inches from westerly corner and 2 inches below woodwork, bolt set horizontally No. 45-H Elevation 2239 864.

**Bruderheim;** C N Ry Gillespie elevator in north concrete foundation wall of main portion of building, 6 inches from northeast corner and 15 inches below woodwork, bolt set horizontally No. L-9 Elevation 2076 406.

Iron pipe filled with concrete  $3\frac{1}{2}$  miles southeast of station and 75 feet east of third pole east of mile post 96 from Vermilion 920 feet westerly from road allowance along east boundary of sec 26-55-20 and 3 feet north of southerly limit of right of way bolt set vertically No. L-10 Elevation 2140 620.

**Buffalo;** C P Ry Concrete bench-mark pier  $3\frac{1}{2}$  miles east of station and at mileage 29.7 from Empress, 20 feet easterly from road allowance along east boundary of sec 27-21-5 and 6 feet south of northerly limit of right of way; bolt set vertically No. 357-D Elevation 2293 271.

Concrete bench-mark pier, 1 mile west of station and at mileage 34.1 from Empress, 1,680 feet westerly from road allowance along east boundary of sec 25-21-6 and 5 feet north of southerly limit of right of way, bolt set vertically No. 356-D Elevation 2332 245.

**Bull's Head,** C.P Ry See Dauntless, B.M. No. 171-C and  
Sevenpersons, B.M. No. 172-C

**Burbank;** C N Ry See Blackfalds, B.M. No. H-31

**Burdett;** C P Ry United church, in west concrete foundation wall, 5 feet 5 inches from southwest corner and 8 inches below woodwork, bolt set horizontally No. 181-C. Elevation 2576 152.

F. A. Lumbar's stationery and drug store, in north concrete foundation wall, 4 feet 7 inches from northeast corner and 21 inches below woodwork, bolt set horizontally No. 180-C Elevation 2574 159.

**Burns;** C P Ry Concrete arch culvert,  $1\frac{1}{2}$  miles west of station and at mileage 80.9 from Lethbridge, in west face of south face-wall, 1 foot below top, bolt set horizontally No. 100-D Elevation 3968 191

**Busby;** N A Ry Concrete bench-mark pier, 3 miles north of station and 65 feet north of fifth pole north of mile post 38 from junction with C N Ry,  $\frac{1}{2}$  mile northerly from road allowance along north boundary of sec 31-57-36 and 3 feet west of easterly limit of right of way, tablet in top of pier No. U-11 Elevation 2321 006

Concrete bench-mark pier, 1 mile south of station and 57 feet north of fourth pole south of mile post 34 from junction with C.N Ry, near the middle of a curve and 2 feet east of westerly limit of right of way, tablet in top of pier. No. U-10. Elevation 2368 735

**Butte;** C N Ry Section house, in west concrete foundation wall, 15 inches from northwest corner and 3 inches below woodwork, bolt set horizontally. No. 29-H. Elevation 2014 108.

Section house at east end of passing-track at Zumbro, Sask., in west concrete foundation wall, 6 feet 6 inches from southwest corner and 4 inches below woodwork, bolt set horizontally No. 27-H Elevation 2067 709.

**Dyron Creek;** C P Ry. See Pasmburg.

**Calgary;** Fundamental bench mark in Central park, behind the public library, on a line joining the centre of the rear wall of the library and the South African war memorial, 130 feet east of the latter, tablet in top of pier. No. 810-C. Elevation 3439 713.

- Public library in stone parapet at south side of steps at main entrance, on a level with fifth step below door sill and midway between north and south edges of parapet bolt set vertically. Elevation 3443 183.

City hall, on south wall 8 inches from southeast corner and seventh course of stonework below water table bolt set horizontally. No. 81-D. Elevation 3427 561.

City hall, tablet in top of stone parapet at head of basement stairway at foot of building 1 foot east of main wall. No. H-3. Elevation 3430 011.

Court house, in west wall 1 foot from northwest corner and third course of stonework below water table bolt set horizontally. No. 30-D. Elevation 3443 189.

C. P. Ry. station in west wall 3 feet from southwest corner 40 feet east of east wall of platform tracks and second course of stonework above platform, bolt set horizontally. No. 2174. Elevation 3440 703.

Building at southwest corner of Eighth Avenue and First Street east in north stone foundation wall 8 feet from southeast corner and 17 inches above pavement of lane bolt set horizontally. No. H-2. Elevation 3437 256.

Langesin bridge over Bow river on Fourth Street east, tablet in top of east concrete wing wall at north end of bridge, 10 inches from northeast edge and 10 inches from southwest edge of wall. No. H-4. Elevation 3430 227.

Plate girder bridge over mouth of Elbow river on C. N. Ry. freight spur line  $\frac{1}{2}$  mile east of city hall in south end of west face of east concrete abutment 9 inches above bridge seat bolt set horizontally. No. 30-F. Elevation 3415 749.

Steel truss bridge over Bow river on C. N. Ry. freight spur line,  $\frac{3}{4}$  mile southeast of city hall and immediately upstream from C. P. Ry. main line bridge in north end of west face of east concrete abutment bolt set horizontally above bridge seat. No. 40-F. Elevation 3400 663.

- C. P. Ry. bridge over Bow river on Calgary Edmonton line 2 miles northeast of C. P. Ry. station north-west concrete pier tablet in bridge east of centre span 5 feet from joint, east end of pier and 3 feet from south edge. No. H-6. Elevation 3407-503.

Calgary Marland highway bridge over C. N. Ry.  $\frac{1}{2}$  mile southeast of C. N. Ry. station and at right angle to Hains, first concrete pedestal south of track at southwest side of bridge bolt set vertically in top of pedestal 6 inches from southeast edge and 6 inches from southwest edge. No. 8-175. Elevation 3441 193.

C. N. Ry. bridge over C. P. Ry. Calgary Marland line  $\frac{1}{4}$  mile southeast of C. P. Ry. station in concrete footing of steel column at south side of bridge and east side of C. P. Ry. track bolt set horizontally in west face of footing 2 feet 2 inches above top. No. 52-11. Elevation 3438 041.

Eighth Street west subway under C. P. Ry. in south face of concrete retaining wall at north side of track and east side of street, 6 inches below top of concrete and 17 inches north of north railing of bridge bolt set horizontally. No. 218-C. Elevation 3448 044.

Campbell, N. A. Ry. (concrete bench mark pier 3 miles north of station and 20 feet north of north pole north of mile post 7 from junction with C. N. Ry., 200 feet northerly from Ft. Saskatchewan-St. Albert road crossing and 3 feet east of westerly limit of right of way, tablet in top of pier. No. U-8. Elevation 2217 625.

\*Established by City Engineer's Department.

When inspected in 1929, it was found that the tablet and a portion of the shaft had been removed.

**Campbell—Concluded**

Concrete bench-mark pier, 1 mile south of station and 40 feet south of sixteenth pole north of mile post 3 from junction with C N Ry, 215 feet northerly from road allowance along north boundary of sec 36-53-25 and 3 feet east of westerly limit of right of way, tablet in top of pier No. U-2. Elevation 2256 043.

**Canmore:** Fundamental bench mark,  $1\frac{1}{2}$  miles west of C P Ry station and  $\frac{1}{2}$  mile south of railway, 138 feet south of northeast corner of sec 23-46-20 and 4 feet east of west limit of road allowance, tablet in top of pier No. 70-F-2. Elevation 2457 855.

High school, north wall in north face of concrete sill of fourth basement window from northeast corner of building, 16 inches from east end of sill and 8 inches below surface, bolt set horizontally No. 71-F. Elevation 2427 001.

Dismantled signal tower beside C N Ry track, at junction with Canmore-Edmonton line,  $2\frac{1}{2}$  miles north of C N Ry station, in northwest face of concrete foundation, 5 feet from westerly corner and 3 inches below top, bolt set horizontally No. 72-F. Elevation 2413 935.

Concrete footing of atmosphere at west side of C N Ry track, 1 mile south of station and at mileage 27.4 from Tofteld, tablet in side of footing facing track 6 inches below top. No. 69-F-3. Elevation 2416 997.

Dismantled signal tower beside C P Ry track,  $\frac{1}{2}$  mile west of station, at intersection of abandoned Grand Trunk Pacific Ry grade, bolt set horizontally in bevelled northwest corner of concrete foundation, 7 inches below top; No. 70-F. Elevation 2430 189.

Concrete bench-mark pier,  $\frac{4}{5}$  miles west of C P Ry station and 12 feet east of fifteenth pole west of mile post 74 from Hardisty, 400 feet westerly from road allowance along east boundary of sec 1-47-21 and 3 feet south of northerly limit of C P Ry right of way, bolt set vertically No. 674-C. Elevation 2496 821.

**Canmore:** C P Ry. Double concrete culvert, 1,150 feet southeast of station, in southeast face of north face-wall, 6 inches below top, bolt set horizontally. No. 235-C. Elevation 4293 870.

Large concrete arch culvert,  $1\frac{1}{2}$  miles southeast of station and at mileage 66.6 from Calgary, in east face of south face-wall, 8 inches below top, bolt set horizontally No. 234-C. Elevation 4292 841.

Double concrete culvert,  $2\frac{1}{2}$  miles northwest of station and at mileage 60.6 from Calgary, in southeast face of north face-wall, 6 inches below top, bolt set horizontally No. 236-C. Elevation 4339 352.

**Canmali:** C N Ry. See Union Junction, B.M. No. U-1.

**Carbondale:** N A Ry. Concrete bench-mark pier,  $2\frac{1}{2}$  miles south of station and 40 feet south of sixteenth pole south of mile post 12 from junction with C N Ry, 390 feet south of a trestle 1,700 feet northerly from road allowance along north boundary of sec 36-54-25 and 3 feet east of westerly limit of the former Edmonton, Dunvegan and British Columbia railway right of way, tablet in top of pier No. U-4. Elevation 2218 643.

Concrete bench-mark pier, 1 mile northwest of station and 80 feet west of seventh pole west of mile post 15 from junction with C N Ry, 1,800 feet westerly from road allowance along east boundary of sec 18-55-24 and 3 feet north of southerly limit of the former Edmonton, Dunvegan and British Columbia railway right of way, tablet in top of pier No. U-5. Elevation 2206 082.

Concrete bench-mark pier, 4 miles northeast of station and 70 feet south of second pole north of mile post 4, 2,315 feet southerly from road allowance along east boundary of sec 34-55-24 and 3 feet east of westerly limit of the former Alberta and Great Waterways railway right of way, tablet in top of pier No. V-1 Elevation 2273 322

**Cardiff**; N A Ry See Carbondale, B M No. U-5.

**Carmanagay**; C P Ry Station, in east or rear concrete foundation wall, 4 feet from southeast corner and 9 inches below woodwork, bolt set horizontally. No. 73-D Elevation 3081 623

Public school, in centre of north face of concrete parapet at north side of main entrance, bolt set horizontally No. 74-D Elevation 3080 917.

Concrete bench-mark pier  $4\frac{1}{2}$  miles north of station and 20 feet south of tenth pole north of mile post 32 from Kipp, 6 feet east of westerly limit of right of way, bolt set horizontally in north side of pier No. 72-D. Elevation 3161 107

**Carrot Creek**, C N Ry Water tank,  $2\frac{1}{2}$  miles west of station, in south face of concrete foundation wall, 4 inches below woodwork and directly beneath the spout, bolt set horizontally No. 78-H Elevation 2746 679

**Carstairs**; C P Ry Bank of Montreal in east concrete foundation wall, 1 foot from northeast corner and 10 inches below woodwork, bolt set horizontally. No. H-16 Elevation 3477 714

Plate girder bridge over Carstairs creek  $2\frac{1}{2}$  miles southeast of station and at mileage 36.8 from Twelfth street east, Calgary, tablet in bridge seat of south concrete abutment, 5 inches from east edge and 7 inches from north edge. No. H-15 Elevation 3306 618

**Carvel**; C N Ry Water tank,  $\frac{1}{2}$  mile west of station, in north face of concrete foundation wall, 3 feet 6 inches to the right of the spout and 5 inches below woodwork, bolt set horizontally No. 67-H Elevation 2454 240

**Caslan**; N A Ry Water tank, 1 mile west of station, in face of concrete foundation which is parallel and nearest to track, 3 feet from easterly edge of this face and 5 inches below woodwork, bolt set horizontally No. V-23. Elevation 2003 769

Concrete bench-mark pier,  $1\frac{1}{2}$  miles east of station and 10 feet west of eleventh pole east of mile post 88 from Carbondale, at the east end of a small cut, 1 055 feet easterly from road allowance along east boundary of sec 22-65-17 and 46 feet north of track, bolt set vertically No. V-24 Elevation 2031 438

**Casilda**; C P Ry Concrete bench-mark pier, 2 miles northwest of station and at mileage 75.25 from Medicine Hat, 100 feet westerly from a north-south fence and 6 feet south of northerly limit of right of way, bolt set vertically. No. 313-D. Elevation 2515 070.

**Castle Mountain**, C P Ry Plate girder bridge over Johnston creek,  $2\frac{1}{2}$  miles southeast of station and at mileage 96.3 from Calgary, in southeast face of south concrete wing-wall at west end of bridge, 19 inches from northeast end of wall and 17 inches above bridge seat, bolt set horizontally. No. 243-C. Elevation 4649 466

Banff-Windermere highway bridge over Bow river,  $\frac{1}{2}$  mile south of railway at a point  $1\frac{1}{2}$  miles northwest of station, in east end of south face of north concrete abutment, 2 feet 2 inches below bridge seat, bolt set horizontally No. 244-C Elevation 4687 997.

**Clatter;** C P Ry Bank of Montreal, at south corner of Grand avenue and Beaver street, in sandstone block foundation of northwest of Beaver street wall, 16 inches from westerly corner and 17 inches above concrete sidewalk, bolt set horizontally No Z-22 Elevation 2695 291

Concrete bench-mark pier  $3\frac{1}{2}$  miles southeast of station and 50 feet west of second pole east of mile post 18 from Cross-station 300 feet westerly from road allowance along east boundary of sec 18-27 13 and 3 feet south of northerly limit of right of way, bolt set vertically No Z-23 Elevation 2714 528.

**Cavendish;** C P Ry Demolished water tank, in face of concrete foundation which is parallel and nearest to track, 4 feet 3 inches from west end of face and 8 inches below top of concrete bolt set horizontally No 350-D Elevation 2240 774.

Concrete bench-mark pier  $3\frac{1}{2}$  miles northeast of station and at mileage 20 2 from Empress 95 feet westerly from road allowance along north boundary of sec 31 21 3 and 7 feet north of southerly limit of right of way, bolt set vertically No 360-D Elevation 2175 606

Concrete bench-mark pier  $3\frac{1}{2}$  miles west of station and at mileage 26 6 from Empress 480 feet easterly from road allowance along east boundary of sec 19-21 4 and 4 feet north of southerly limit of right of way, bolt set vertically No 354-D Elevation 2236 438

**Cayley;** C P Ry Residence of H G Hallett on northeast  $\frac{1}{2}$  sec 13-17-20  $\frac{1}{2}$  mile south of station and 360 feet west of railway, in north concrete foundation wall 21 feet from northwest corner 20 inches below woodwork, and directly beneath centre window bolt set horizontally No CC-4 Elevation 3500 630.

Iron pipe in ground,  $2\frac{1}{2}$  miles north of station and 50 feet south of eighth pole south of mile post 45 from Twelfth street east, Calgary, 720 feet northerly from road allowance along north boundary of sec 26-17-20 and 3 feet east of westerly limit of right of way, brass cap on top of pipe No. CC-3-A. Elevation 3513 923.

**Cereal;** C N Ry Concrete bench-mark pier,  $1\frac{1}{2}$  miles east of station and 6 feet west of tenth pole west of mile post 81 from Kindersley, 330 feet west of a cut 2,200 feet westerly from road allowance along east boundary of sec 23-26-6 and 2 feet south of northerly limit of right of way tablet in top of pier No K-90 Elevation 2542 842

Concrete bench-mark pier 2 miles west of station and 306 feet west of mile post 85 from Kindersley 620 feet easterly from road allowance along east boundary of sec 25-26-7 and 3 feet south of northerly limit of right of way bolt set vertically No K-91 Elevation 2512 237

**Champion;** C P Ry Public school, in northwest concrete foundation wall, 5 feet 6 inches from westerly corner and 2 feet below brickwork, bolt set horizontally No 71-D Elevation 3168 372

**Chancellor;** C P Ry Alberta-Pacific Grain Company's elevator, in east concrete foundation wall, 14 feet from southeast corner and 3 inches below metal sheathing bolt set horizontally No 290-D Elevation 2925 009

**Chred;** N A Ry Concrete bench-mark pier, 1 mile south of south switch and 45 feet north of mile post 212 from Carletondale, 35 feet north of south mile sign and 47 feet west of track, bolt set vertically No V-48 Elevation 1686 501

Concrete bench-mark pier,  $2\frac{1}{2}$  miles north of north switch and 20 feet north of mile post 216 from Carletondale, at seventh pole north of a bridge and 45 feet east of track, bolt set vertically No. V-49 Elevation 1717 533.

**Chowvin;** C N Ry Section house, in east concrete foundation wall, 3 feet from southeast corner and 10 inches below woodwork, bolt set horizontally No. 30-H. Elevation 2060 011

**Cheecham,** N A Ry Concrete bench-mark pier 1 mile north of north switch and 18 feet north of mile post 248 from Cardendale, 36 feet north of north mile sign and 52 feet east of track, bolt set vertically No V-48. Elevation 1560 159.

**Chetumwre Lake,** C N Ry Plate girder bridge over C P Ry irrigation canal  $1\frac{1}{2}$  miles east of station and at mileage 122 9 from Hanna, in top of south concrete retaining wall at east end of bridge 11 inches from east end of wall bolt set vertically No. 8-167 Elevation 3364 216

Concrete bench-mark pier 1 400 feet northwest of station and 6 feet east of sixteenth pole west of mile post 124 from Hanna 100 feet west of a fence running south from railway 2 800 feet westerly from road allowance along east boundary of sec. 3-24-28 and 2 feet south of northerly limit of right of way bolt set vertically No. 8-168 Elevation 3370 230

Steel truss bridge over C P Ry irrigation canal,  $\frac{1}{2}$  mile west of station and at mileage 124 9 from Hanna in top of north concrete retaining wall at east end of bridge 16 inches from east end of wall bolt set vertically No. 8-169 Elevation 3385 457.

**Chitwell,** C P Ry Barn owned by Alexander Wilson on northeast  $\frac{1}{2}$  sec. 23-40-25 about 100 yards north of station, in east concrete foundation wall 18 inches from southeast corner and 4 inches below woodwork, bolt set horizontally No. Z-2 Elevation 2890 882

**Chin;** C P Ry Public school in concrete foundation of west side wall, 4 feet 8 inches from southwest corner and 15 inches below woodwork, bolt set horizontally No. 191-4 Elevation 2780 261

Plate girder bridge,  $\frac{1}{2}$  mile west of station and at mileage 91 1 from Donmore in south face of west concrete abutment, 1 foot below top, bolt set horizontally No. 192-6 Elevation 2773 507

**Chinook,** C N Ry United church, in concrete foundation of southeast side wall 17 inches from easterly corner of main portion of building and 10 inches below woodwork, bolt set horizontally No. 8-94 Elevation 2843 969.

Ardena hotel, in southwest concrete foundation wall, 9 feet northwest of side entrance and 8 inches below woodwork, bolt set horizontally No. 8-93 Elevation 2550 286.

Concrete bench-mark pier  $1\frac{1}{2}$  miles southeast of station and 16 feet west of sixteenth pole west of mile post 87 from Kindersley, 610 feet westerly from road allowance along east boundary of sec. 34-28-7 and 2 feet south of northerly limit of right of way bolt set vertically No. 8-92 Elevation 2524 827.

Concrete bench-mark pier  $2\frac{1}{2}$  miles northwest of station and 26 feet east of twelfth pole west of mile post 91 from Kindersley 615 feet west of a whistle post for eastbound trains 1 870 feet westerly from road allowance along east boundary of sec. 7-20-7 and 2 feet south of northerly limit of right of way tablet in top of pier No. 8-95 Elevation 2582 842

**Chip Lake,** C N Ry Concrete pier the more northerly of two  $\frac{1}{2}$  mile west of station 36 feet south of northerly limit of railway right of way, 12 feet north of centre line of Edmonton-Jasper highway 1 535 feet westerly from road allowance along east boundary of sec. 31-53-10 and opposite a point on railway at tenth pole east of mile post 87 from Edmonton This pier was originally the footing of home telegraph for a diamond crossing, bolt set horizontally in west face, 6 inches below top. No. 75-H Elevation 2897 300.

**Chipman; C N Ry** Iron pipe filled with concrete,  $\frac{3}{4}$  miles southeast of station and midway between sixth and seventh poles east of mile post 82 from Vermilion, 660 feet east of a private crossing and 2 feet north of southerly limit of right of way bolt set vertically No L-14 Elevation 2197 642

Iron pipe filled with concrete,  $\frac{1}{2}$  mile northwest of station and 66 feet west of fourth pole east of mile post 86 from Vermilion, 2,520 feet west of west switch of passing track and 3 feet south of northerly limit of right of way, bolt set vertically No L-13 Elevation 2188 855

**Chisholm; N A Ry** Concrete bench-mark pier,  $2\frac{1}{2}$  miles north of station and 20 feet south of sixth pole north of mile post 112 from junction with C N Ry, 37 feet east of track bolt set vertically No L-30 Elevation 1969 123

Concrete bench-mark pier  $1\frac{1}{2}$  miles south of station and 45 feet south of second pole north of mile post 106 from junction with C N Ry 550 feet southerly from road allowance along east boundary of sec 23-68-2 and 41 feet east of track, bolt set vertically No L-29 Elevation 1937 812

**Chokio; C P Ry** Concrete bench-mark pier, 1 mile southwest of station and 23 feet west of mile post 48 from Lethbridge, 1,000 feet east of west mile sign and 8 feet south of northerly limit of right of way, bolt set horizontally in northwest side of pier No 92-D Elevation 3450 203

**Claresholm; C P Ry** Public school, in south concrete foundation wall, 1 foot from southwest corner and 2 feet 6 inches below corner stone, bolt set horizontally. No. CC-13 Elevation 3393 522

**Claymore; C N Ry** Iron pipe filled with concrete  $\frac{1}{4}$  mile west of station and 70 feet west of eighth pole east of mile post 8 from Vermilion, 795 feet westerly from road allowance along east boundary of sec 25-50-8 and 4 feet south of northerly limit of right of way, bolt set vertically No L-33 Elevation 2071 927

**Clive; C P Ry** Concrete bench-mark pier, 1 mile northwest of station and 45 feet east of fourteenth pole west of mile post 94 from Coronation, beside a private crossing and 2 feet north of southerly limit of right of way, tablet in top of pier. No. Z-3 Elevation 2838 505

**Clover Bar; C N Ry** Bridge over North Saskatchewan river, 1 mile west of station, in west face of east concrete abutment, 4 feet 6 inches south of southerly girder and 3 feet 10 inches above bridge seat, bolt set horizontally. No. 57-H. Elevation 2130 091

**Conkdale; C P Ry** Concrete box culvert, 4 miles east of station and at mileage 94 1 from Dunmore, in west end of south face, 2 feet 3 inches below top; bolt set horizontally No. 193-C Elevation 2811 899

**Coalhurst; C P Ry** See Kipp, B.M. No. 81-D.

**Cochrane; C P Ry** Plate girder bridge over Big Hill creek,  $\frac{1}{2}$  mile west of station and at mileage 23 6 from Calgary, in south end of east or rear face of east concrete abutment, 8 inches below top, bolt set horizontally. No. 223-C Elevation 3747 753.

Steel truss bridge over Bow river, 3 miles west of station and at mileage 25 7 from Calgary, in north face of concrete coping on north retaining wall at east end of bridge, 20 inches from west end of wall, bolt set horizontally. No. 224-C Elevation 3727 314.

**Coleman; C P Ry** Concrete box culvert,  $1\frac{1}{2}$  miles southeast of station and at mileage 90 1 from Lethbridge, in west end of southwest face, 9 inches below top, bolt set horizontally. No. 104-D. Elevation 4275 660.



Concrete box culvert  $\frac{1}{2}$  mile west of station and at mileage 93.1 from Lethbridge in east end of north face 2 feet below top bolt set horizontally. No. 106-D. Elevation 4310 843

Concrete box culvert  $2\frac{1}{2}$  miles west of station and at mile post 94 from Lethbridge 60 feet east of a road crossing, in centre of north face of culvert, 2 feet below top bolt set horizontally. No. 106-D. Elevation 4367 266

**Compoer, C. P. Ry.** Concrete bench-mark pier 2 miles east of station and at mileage 41.4 from Kerrobert 30 feet east of south pole west of a road crossing and 3 feet south of northerly limit of right of way bolt set vertically. No. Z-45. Elevation 2344 847

Concrete bench-mark pier 2 miles northwest of station and at mileage 45.4 from Kerrobert 125 feet easterly from road allowance along east boundary of sec. 14-31-1 and 3 feet north of southerly limit of right of way, bolt set vertically. No. Z-45. Elevation 2329 462

Concrete bench-mark pier  $\frac{1}{2}$  mile east of L. Hart Sask. 23 feet east of eleventh pole east of mile post 37 from Kerrobert or sixteenth pole east of road allowance along east boundary of sec. 27-12-20 at the east end of a fill and 3 feet south of northerly limit of right of way bolt set vertically. No. Z-47. Elevation 2394 938

Concrete bench-mark pier  $2\frac{1}{2}$  miles south of station on road allowance along east boundary of sec. 12-13-1 3 feet east of west limit of road allowance and 20 feet south of northeast corner of sec. 12 bolt set vertically. No. 641-C. Elevation 2324 444

Concrete bench-mark pier  $\frac{1}{2}$  miles south of station on road allowance along east boundary of sec. 25-32-1 3 feet east of west limit of road allowance and 20 feet south of northeast corner of sec. 25 bolt set vertically. No. 640-C. Elevation 2324 366

Royal Bank at Loversna Sask. in concrete foundation of north side wall 12 feet from northwest corner and 1 foot below woodwork, bolt set horizontally. No. 637-4. Elevation 2365 438

Concrete bench-mark pier 1 mile north of Loversna Bank on road allowance along east boundary of sec. 25-31-1 3 feet east of west limit of road allowance and 24 feet south of northeast corner of sec. 25 bolt set vertically. No. 638-C. Elevation 2296 864

Concrete bench-mark pier 1 mile north of Loversna Bank on road allowance along east boundary of sec. 14-32-20 3 feet east of west limit of road allowance and 20 feet north of southeast corner of sec. 14 bolt set vertically. No. 639-C. Elevation 2385 555

Concrete bench-mark pier 2 miles south of Loversna Bank on road allowance along east boundary of sec. 1-31-1 3 feet east of west limit of road allowance and 20 feet south of northeast corner of sec. 1 bolt set vertically. No. 635-C. Elevation 2339 537

Concrete bench-mark pier 2 miles south of Loversna Bank on road allowance along east boundary of sec. 13-30-1, 3 feet west of east limit of road allowance and 25 feet south of northeast corner of sec. 13, bolt set vertically. No. 634-C. Elevation 2377 626

**Craklin, N. A. Ry.** Concrete bench-mark pier  $3\frac{1}{2}$  miles north of north switch and 80 feet south of thirteenth pole south of mile post 190 from Carletonplace 1120 feet northerly from road allowance along north boundary of sec. 12-77-A and 50 feet east of track bolt set vertically. No. V-54. Elevation 1831 156

Concrete bench-mark pier 1 mile west of west switch and 90 feet east of second pole east of mile post 192 from Carletonplace 2,220 feet easterly from road allowance along east boundary of sec. 26-76-B and 48 feet north of track bolt set vertically. No. V-63. Elevation 1862 836

**Courich; C.N.Ry.** Concrete bench-mark pier,  $2\frac{1}{2}$  miles southeast of station and 70 feet north of second pole north of mile post 115 from Mirror, 7 feet east of westerly limit of right of way, bolt set horizontally in northeast side of pier. No. 42-F. Elevation 3455 525.

**Comest; C.P.Ry.** Pioneer Grain Company's elevator, in south concrete foundation wall, 8 inches from southeast corner and 8 inches below wood-work, bolt set horizontally. No. Z-36. Elevation 2370 940.

Concrete bench-mark pier,  $2\frac{1}{2}$  miles southwest of station and at mileage 87.9 from Kerrobert, 300 feet east of a road crossing and 3 feet south of northerly limit of right of way, bolt set vertically. No. Z-35. Elevation 2430 573.

**Cooking Lake; C.N.Ry.** Water tank, in northwest face of concrete foundation wall, 12 feet 6 inches to the right of the spout and 4 inches below wood-work, bolt set horizontally. No. 53-H. Elevation 2432 658.

**Coronado; C.N.Ry.** See Federal, B.M. No. V-3.

**Coronation, C.P.Ry.** Fundamental bench mark in public school grounds, 34 feet north of north line of Norfolk avenue 170 feet west of west line of George street and 36 feet south of front wall of school, tablet in top of pier No. 822-C. Elevation 2596 456.

Municipal steel water tank, at north side of Windsor avenue, between Royal and King streets tablet in top of southeasterly concrete footing, 5 inches from southeast edge and midway between northeast and southwest edges. No. 823-C. Elevation 2611 793.

Bank of Toronto in west concrete foundation wall, 16 inches from southwest corner and 5 feet below brickwork, bolt set horizontally. No. Z-28. Elevation 2611 939.

Concrete bench-mark pier  $1\frac{1}{2}$  miles west of station and 70 feet west of north pole east of mile post 2 or fourteenth pole west of road allowance along east boundary of sec. 15-36-11. 4 feet north of northerly limit of right of way bolt set vertically. No. Z-27. Elevation 2607 618.

**Countess; C.P.Ry.** Alberta Pacific Grain Company's elevator, tablet in east concrete foundation wall, 24 feet 8 inches from southeast corner and 6 inches below woodwork, No. 336-D-2. Elevation 2496 022.

Concrete bench-mark pier  $2\frac{1}{2}$  miles west of station and at mileage 112.4 from Langston, 45 feet westerly from road allowance along east boundary of sec. 7-21-17 and 5 feet south of northerly limit of right of way, bolt set vertically. No. 335-D. Elevation 2535 772.

**Coyuts, C.P.Ry.** International Boundary monument No. 334, 70 feet east<sup>ee</sup> of track, tablet in top of concrete base of monument. Elevation 3406 066.

**Cowley; C.P.Ry.** Public school in northeast or front concrete foundation wall, 4 feet from easterly corner and  $\frac{1}{2}$  foot below top of foundation, bolt set horizontally. No. 97-D. Elevation 2538 378.

Steel trestle bridge over Castile river  $2\frac{1}{2}$  miles southeast of station and at mileage 65.8 from Lethbridge, in east face of north concrete retaining wall at west end of bridge 2 feet 8 inches above bridge seat, bolt set horizontally. No. 96-D. Elevation 3724 133.

Concrete box culvert,  $2\frac{1}{2}$  miles southeast of station and at mileage 65.8 from Lethbridge, in west face of coping on south end of culvert, 8 inches below top, bolt set horizontally. No. 95-D. Elevation 3732 763.

**Crodebeck; C.P.Ry.** See New Dayton, B.M. No. 206-C.

<sup>ee</sup>United States Coast and Geodetic Survey Bench Mark No. II-13.

**Craigville; C P Ry** Concrete bench-mark pier,  $\frac{1}{2}$  mile northeast of station and at mileage 67.2 from Basanto, 66 feet east of second pole east of road allowance along east boundary of sec. 13-27-28 and 3 feet south of northerly limit of right of way, tablet on top of pier No. 291-D-2. Elevation 2029.049.

**Craigville; C N Ry** Concrete bench-mark pier, 1 mile east of station and 7 feet east of seventeenth pole west of mile post 13 from Hanna, 100 feet east of a private crossing, 1.645 feet easterly from road allowance along east boundary of sec. 20-31-16 and 2 feet south of northerly limit of right of way, tablet on top of pier No. H-116. Elevation 2831.606.

Concrete bench-mark pier, 3 miles west of station and 10 feet west of thirteenth pole west of mile post 17 from Hanna, 637 feet east of a galvanized steel pipe culvert, 2,400 feet easterly from road allowance along east boundary of sec. 15-31-17 and 2 feet south of northerly limit of right of way, tablet on top of pier No. H-118. Elevation 2876.979.

**Greenfield, C P Ry** Concrete arch culvert, 3 miles north of station and 180 feet south of mile post 32 from Twelfth street east, Calgary, tablet on top of coping on east end of culvert, 1 foot from north end of coping No. H-14. Elevation 3507.795.

**Dalhousie, C N Ry** Curved sandstone cut,  $1\frac{1}{2}$  miles northeast of station and at mileage 39.4 from Edson, 650 feet east of edge of a deep ravine, bolt set horizontally on north side of cut, 160 feet from west end and 2 feet below track level. No. 88-H. Elevation 3490.789.

**Dapp, N A Ry** Concrete bench-mark pier, 1 mile north of station and 100 feet south of mile post 67 from junction with C N Ry, 500 feet northerly from road allowance along east boundary of sec. 14-62-27 and 3 feet east of westerly limit of right of way, bolt set vertically No. L-18. Elevation 2026.916.

**Danvers, C P Ry** Large concrete building, vacant in 1928, near station and about 400 feet northwest of railway, in southwest wall, 1 foot from southerly corner and 3 feet 4 inches below window sills, bolt set horizontally No. 171-C. Elevation 2388.668.

Concrete box culvert,  $1\frac{1}{2}$  miles northeast of station and at mile post 6 from Danvers, in northeast face of west wingwall at south end of culvert, bolt set horizontally No. 170-C. Elevation 2363.127.

**Decadine, C N Ry** Rock cut on abandoned Grand Trunk Pacific Ry grade,  $\frac{1}{2}$  mile north of C N Ry at a point  $1\frac{1}{2}$  miles east of station and at mileage 11.6 from Jasper, on north side of cut, near centre and 460 feet west of dismantled bridge over Murtle river, bolt set horizontally slightly below surface of railway grade No. 108-H. Elevation 2625.964.

Rock cut on abandoned Grand Trunk Pacific Ry grade,  $\frac{1}{2}$  mile north of C N Ry at a point  $3\frac{1}{2}$  miles west of station,  $1\frac{1}{2}$  miles east of Alberta-British Columbia boundary and at mileage 13.7 from Jasper, bolt set horizontally on north side of cut, 66 feet from west end. No. 109-B. Elevation 3695.565.

Short deep curved rock cut, 1 mile southwest of Yellowhead, B.C.,  $1\frac{1}{2}$  miles southwest of Alberta-British Columbia boundary and 10 feet west of fourteenth pole east of mile post 19 from Jasper, 470 feet west of Yellowhead mile sign, bolt set horizontally on north side of cut, 135 feet from east end. No. 110-H. Elevation 3700.641.

**Deerone, N A Ry** Concrete bench-mark pier, 1 mile southeast of station, 70 feet west of fifteenth pole west of mile post 126 from junction with C.N. Ry and 62 feet south of track, bolt set vertically No. U-38. Elevation 1921.087.

**Delacour;** C N Ry Plate girder bridge over irrigation canal, 2 miles north of station and at mileage 110.1 from Murro, in east end of south face of north concrete abutment, 20 inches above bridge seat, bolt set horizontally No. 43-F Elevation 3308.972.

**Delburne;** C N Ry United Grain Growers elevator No. 64, in east concrete foundation wall, 9 inches from northeast corner and 4 inches below metal sheathing, bolt set horizontally No. 59-F Elevation 2834.581.

**Dells;** C N Ry Queens hotel, in southeast concrete foundation wall of alcove, 40 feet 9 inches from front or Main street wall, 7 inches from south corner of alcove and 9 inches below woodwork, bolt set horizontally No. 8-120. Elevation 2980.780.

Concrete bench-mark pier, 1 mile northeast of station and between first and second poles east of mile post 21 from Hanna, 56 feet east of east mile sign, 81 feet east of a private crossing and 2 feet south of northerly limit of right of way, tablet in top of pier No. 8-119 Elevation 2968.472.

**Denhart;** C P Ry Concrete bench-mark pier,  $1\frac{1}{2}$  miles northeast of station and at mileage 68.8 from Empress, 40 feet westerly from road allowance along east boundary of sec. 12-20-11 and 6 feet south of northerly limit of right of way bolt set vertically No. 346-D Elevation 2534.783.

Concrete bench-mark pier  $3\frac{1}{2}$  miles west of station and at mileage 73.6 from Empress, at the east end of a long fill and to the west of a long snow fence, 3 feet south of northerly limit of right of way, bolt set vertically No. 345-D. Elevation 2498.837.

**Devenish;** N A Ry Concrete bench-mark pier,  $\frac{1}{2}$  mile north of north switch and 5 feet north of eleventh pole north of mile post 184 from Carbondale, 705 feet south of north mile sign, 2,210 feet southerly from road allowance along north boundary of sec. 33-75-8 and 47 feet west of track, bolt set vertically. No. V-51. Elevation 2141.821.

Concrete bench-mark pier,  $4\frac{1}{2}$  miles north of north switch and 50 feet north of first pole north of mile post 188 from Carbondale, 66 feet north of a bridge, 3,560 feet southerly from road allowance along east boundary of sec. 21-76-8 and 46 feet west of track, bolt set vertically No. V-62. Elevation 1983.522.

Concrete bench-mark pier,  $3\frac{1}{2}$  miles southwest of south switch and 28 feet west of third pole east of mile post 180 from Carbondale, 625 feet westerly from road allowance along east boundary of sec. 13-75-9 and 41 feet north of track, bolt set vertically N V-50 Elevation 2128.318.

**Devile;** C N Ry Concrete bench-mark pier,  $\frac{1}{2}$  mile southeast of station and 63 feet east of sixth pole west of mile post 97 from Wainwright or thirteenth pole east of road allowance along east boundary of sec. 32-51-20, 3 feet south of northerly limit of right of way, tablet in top of pier No. 52-H-2. Elevation 2441.035.

**DuWinton;** C P Ry Concrete box culvert, 2 miles northwest of station and at mileage 15.1 from Twelfth street east, Calgary, in west face of coping on north end of culvert, bolt set horizontally No. 56-D Elevation 2540.307.

Concrete box culvert, 1 mile northwest of station and at mileage 16.2 from Twelfth street east, Calgary, in north face of coping on east end of culvert; bolt set horizontally No. 57-D Elevation 3600.384.

**Didbury;** C P Ry Building at northwest corner of Railway avenue and Heupler st., formerly occupied by Union Bank, but vacant in 1928, in east or front concrete foundation wall, 1 foot from northeast corner and 5 feet 8 inches below window sills, bolt set horizontally No. H-18. Elevation 3413 737.

Concrete box culvert,  $2\frac{1}{2}$  miles south of station and at mileage 44 2 from Twelfth street east, Calgary, tablet in top of coping on east end of culvert, 11 inches from south end No. H-17 Elevation 3434 031

**Dinnant;** C N Ry Water tank,  $\frac{1}{2}$  mile south of station, in southerly concrete footing of the two which are parallel and nearest to track, bolt set horizontally in west face of footing, 4 inches below woodwork No. 73-F. Elevation 2445 449

**Dobson,** C N Ry Concrete bench-mark pier, 2 miles southeast of east switch and 32 feet east of eighth pole west of mile post 95 from Kindersley, 110 feet west of a whistle post for west-bound trains, 910 feet easterly from road allowance along east boundary of sec. 21-29-8 and 2 feet south of northerly limit of right of way, tablet in top of pier No. H-96 Elevation 2567 509.

Concrete bench-mark pier 2 miles northwest of west switch and 30 feet east of ninth pole west of mile post 99 from Kindersley, 1,050 feet east of the centre of a slough, 2,800 feet westerly from road allowance along east boundary of sec. 25-29-9 and 2 feet south of northerly limit of right of way, tablet in top of pier No. H-97 Elevation 2533 610

**Dormice,** C N Ry C. E. Knudson's general store 500 feet northwest of station in south concrete foundation wall, 11 inches from southeast corner and 7 inches below woodwork, bolt set horizontally No. 66-F Elevation 2537 906.

Concrete bench-mark pier  $\frac{1}{2}$  miles south of station and 6 feet north of eleventh pole south of mile post 58 from Tufeld or sixth pole south of road allowance along north boundary of sec. 32-42-21 35 feet north of a private crossing and 4 feet east of westerly limit of right of way, tablet in top of pier. No. 65-F-2. Elevation 2616 706.

**Draper,** N A Ry Concrete bench-mark pier,  $\frac{1}{2}$  mile southeast of station and 25 feet west of fourteenth pole east of mile post 282 from Carbondale, 165 feet west of east end of a curve and 50 feet south of track, bolt set vertically. No. V-77. Elevation 839-469.

Concrete bench-mark pier 3 miles southeast of station and 50 feet west of third pole east of mile post 279 from Carbondale or of eighteenth pole east of a bridge over a stream 47 feet north of track, bolt set vertically. No. V-76. Elevation 1060-271

Concrete bench-mark pier,  $\frac{1}{2}$  mile west of station and 55 feet east of fifteenth pole west of mile post 282 from Carbondale, 55 feet west of a small wooden box culvert and 55 feet south of track, about 6 feet above track level, on the west slope of a small ravine, bolt set vertically No. V-78. Elevation 819 515.

**Drumheller;** C N Ry Highway bridge over Red Deer river, at foot of Second street west, in top of southeast concrete abutment, 14 inches from northeast or downstream face and 16 inches from northwest face, bolt set vertically. No. B-133. Elevation 2247 115.

Concrete bench-mark pier, 1 mile west of station and 15 feet east of seventh pole east of mile post 51 from Hanna, 15 feet east of a point in line with east wall of Ukrainian Labour Temple, 213 feet east of a road crossing and 2 feet north of southerly limit of right of way, tablet in top of pier. No. B-131. Elevation 2356-961.

**Drumheller—Concluded**

Steel truss bridge over Red Deer river, 2½ miles west of station and at mileage 50.1 from Hanna, in concrete ballast wall on top of north abutment, directly in line with inner side of westerly or upstream truss and 10 inches from south edge of wall, bolt set vertically No. 8-130 Elevation 2252 251.

Concrete bench-mark pier, 5½ miles northwest of station and 43 feet north of ninth pole north of mile post 47 from Hanna, 585 feet south of a trestle over Fox creek 27 feet north of a whistle post for trains bound towards Calgary and 5 feet east of westerly limit of right of way, tablet in top of pier. No. 8-129. Elevation 2430 683

**Duchess; C P Ry** Public school, in northeast or rear concrete foundation wall, 12 feet 4 inches from northerly corner and 5 inches below woodwork; bolt set horizontally No. 340-D. Elevation 2482 492

Concrete bench-mark pier, 2½ miles southeast of station and at mileage 80.5 from Empress 1,050 feet westerly from road allowance along east boundary of sec. 27-20-14, which passes through a subway under the railway 6 feet south of northerly limit of right of way, bolt set vertically No. 341-D. Elevation 2431 170.

Concrete bench-mark pier, 3½ miles west of station and at mileage 95.6 from Empress, almost in line with north fence of road allowance between townships 20 and 21 and 5 feet south of northerly limit of right of way, bolt set vertically No. 339-D. Elevation 2483 209.

**Duet; N A Ry** See Draper, B.M. No. V-76.

**Duffield, C N Ry** Concrete bench-mark pier, 1 mile west of station and 34 feet east of ninth pole west of mile post 39 from Edmonton, 1,800 feet east of a road crossing, 18 feet west of a private crossing and 5 feet south of northerly limit of right of way, bolt set horizontally in north side of pier No. 68-H. Elevation 2375 913.

**Duhamel; C N Ry** Concrete bench-mark pier, 2 miles north of station and at first pole south of mile post 36 from Tofield or of eleventh pole southerly from road allowance along east boundary of sec. 3-45-21, 4 feet west of easterly limit of right of way, bolt set horizontally in north side of pier. No. 69-F. Elevation 2380 178.

**Dunmore; C P Ry** Roundhouse, in west concrete foundation wall, 10 inches from southwest corner and 2 feet 8 inches below brickwork, bolt set horizontally. No. 165-C. Elevation 2413 262

Concrete bench-mark pier, 5½ miles east of station, 26 feet west of mile post 135 from Swift Current and 7 feet north of southerly limit of right of way, bolt set horizontally in north side of pier No. 164-C. Elevation 2418 696.

Bridge over Bullshead creek, 2½ miles northwest of station and at mileage 142.5 from Swift Current, on west end of north or rear face of north concrete abutment, 6 inches below top, bolt set horizontally No. 166-C. Elevation 2317 248.

**Dunn; C N Ry** Section house, 600 feet east of east switch, in northeast or front concrete foundation wall, 19 inches from northerly corner and 5 inches below woodwork, bolt set horizontally No. 32-H. Elevation 2109 003.

**Donschalt; C N Ry** See Bamtree B.M. No. 8-151

**Edgerton; C N Ry** See Dunn, B.M. No. 33-H.

**Edmonton.** Fundamental bench mark in sewer bed oval at northwest corner of 99th street and 101 A avenue 12 feet from rounded curb of roadway, tablet in top of pipe No. 908-4 Elevation 2,82 674.

Post office in west wall 4 feet south of south wall of clock tower and in second course of masonry above sidewalk bolt set horizontally No. 80-H. Elevation 2188 173.

Court house in east wall 23 inches from northeast corner and first course of masonry above granite foundation bolt set horizontally No. 46-H. Elevation 2188 823.

C. N. Ry. office building formerly a public school immediately east of station in north wall 7 feet from northwest corner bolt set horizontally in face of concrete sill of window 4 inches from west end of sill and 3 inches below surface No. 11 Elevation 2187 399.

Provincial Parliament building in south wall of west wing 13 feet east of the three arches forming the west entrance first course of masonry above ground bolt set horizontally No. 81 H. Elevation 2143 949.

High level bridge highway and C. P. Ry. over North Saskatchewan river in ballast wall on top of north concrete abutment 20 inches from east end of wall and 1.8 inches above bridge seat bolt set horizontally No. 60-H. Elevation 2168 461.

In same bridge as bench mark No. 60-H in ballast wall on top of north concrete abutment tablet in top of portion of wall between C. P. Ry. track and eastern track of street railway 10 inches from north edge and 11 inches from east edge of this portion and 13 feet from east end of wall No. H-34 Elevation 2172 381.

In same bridge as bench mark No. 60-H low down near river bank in northeastern concrete footing of first steel truss tower south of river, tablet in top of footing near northeast corner 8 inches south and 7 inches west of upper edge of truss foot No. H-30 Elevation 2052 185.

In same bridge as H M. No. 60-H in north face of south concrete abutment 4 feet 4 inches above bridge seat and 1 foot east of west end of same, bolt set horizontally No. H-49 Elevation 2176 391.

Concrete post marking triangulation station of Geodetic Survey of Canada in grounds of University of Alberta 31 feet northeast of northeast corner of Arts Building tablet in top of post No. Elevation 2204 162.

Concrete bench mark post 3 miles south of Strathcona station and 30 feet north of second pole north of mile post 94 from Red Deer 500 feet north of a private trapping and 1 foot east of westerly limit of C. P. Ry. right of way bolt set vertically No. H-48-A Elevation 2212 552.

See also North Edmonton and Lonsdale Junction.

**Edson.** C. N. Ry. Water tank  $\frac{1}{2}$  mile southwest of station, in face of concrete foundation which is parallel and nearest to main line track, 3 feet to the left of the spout and 3 inches below woodwork bolt set horizontally No. 80-H Elevation 2984 726.

Pulley wheels in concrete foundation of southwest side wall, 5 inches from southerly corner and 3 feet 8 inches below brickwork, bolt set horizontally No. 81-H. Elevation 2043 215.

**Edward.** C. N. Ry. Water tank  $1\frac{1}{2}$  miles east of station and at mile post 76 from 84 Paul Junction in face of concrete foundation parallel and nearest to track 5 feet 10 inches east of the spout and 6 inches below woodwork, bolt set horizontally No. DD-12 Elevation 2112 344.

— Check levelling at a later date indicates that the elevation of this bench mark may not be precise.

**Edward—Concluded**

Concrete bench-mark pier, 1 mile west of station and 10 feet west of eleventh pole west of mile post 74 from St. Paul Junction, 1,165 feet easterly from road allowance along north boundary of sec. 35-59-16 and 3 feet south of northerly limit of right of way; bolt set vertically No. DD-11. Elevation 2058 678.

Concrete bench-mark pier,  $4\frac{1}{2}$  miles west of station and 48 feet east of first pole east of mile post 70 from St. Paul Junction, 760 feet easterly from road allowance along east boundary of sec. 31-59-16 and 3 feet south of northerly limit of right of way, bolt set vertically. No. DD-10. Elevation 1967 195.

**Egremont; N.A. Ry** Concrete bench-mark pier,  $1\frac{1}{2}$  miles north of station and 60 feet south of sixth pole south of mile post 32 from Carbondale, 3,300 feet southerly from road allowance along north boundary of sec. 31-58-21 and 3 feet west of easterly limit of right of way, bolt set vertically No. V-9. Elevation 2135 787.

Concrete bench-mark pier,  $3\frac{1}{2}$  miles southwest of station and 21 feet west of eighteenth pole west of mile post 28 from Carbondale, 450 feet easterly from road allowance along east boundary of sec. 15-58-22 and 4 feet north of southerly limit of right of way, bolt set vertically No. V-8. Elevation 2039 443.

**Eldon; C.P. Ry** Concrete box culvert, 479 feet southeast of east switch of passing-track and at mileage 106.2 from Calgary, in southeast face of north face-wall, 6 inches below top, bolt set horizontally No. 245-C. Elevation 4819 845.

**Elk Island; C.N. Ry** See Bruderheim, B.M. No. L-9.

**Ellerslie; C.P. Ry** Concrete bench-mark pier, 1 mile south of station and 40 feet north of ninth pole south of mile post 90 from Red Deer, 300 feet south of a private crossing and 3 feet west of easterly limit of right of way, bolt set vertically. No. H-47-A. Elevation 2273 024.

**Ellicott; N.A. Ry** Concrete bench-mark pier,  $1\frac{1}{2}$  miles north of station and 30 feet north of second pole south of mile post 67 from Carbondale, 790 feet southerly from road allowance along north boundary of sec. 12-64-20 and 3 feet west of easterly limit of right of way, tablet in top of pier. No. V-18. Elevation 2127 340.

**Elnora; C.N. Ry** Concrete bench-mark pier 4 miles north of station and 60 feet south of third pole north of mile post 34 from Mirror, 200 feet south of a short deep clay cut and 4 feet east of westerly limit of right of way, bolt set horizontally in north side of pier No. 57 F. Elevation 2929 534.

**Empress; C.P. Ry.** Fundamental bench mark in the eastern outskirts of the town, between Saskatchewan creamery and Athletic park and in line with telephone poles on east side of road allowance along fourth meridian, 166 feet south and 58 feet east of northeast corner of sec. 13-23-1, tablet in top of pier No. 366-D-2. Elevation 1982 181.

Public school, in west or rear concrete foundation wall, 9 feet 3 inches from northwest corner and 3 feet 9 inches below brickwork, bolt set horizontally. No. 366-D. Elevation 2001 867.

Round house, in south concrete foundation wall, 6 feet 4 inches east of small doorway leading to engine stalls and 2 feet 8 inches below brickwork; bolt set horizontally No. 365-D. Elevation 1971 565.



Concrete bench-mark pier,  $1\frac{1}{2}$  miles northeast of station,  $3\frac{1}{2}$  miles by travelled road, on road allowance along east boundary of sec. 21-23-29, 4 feet east of west limit of road allowance and 11 feet south of northeast corner of sec. 21, bolt set vertically. No. 625-C. Elevation 2148 547.

Concrete bench-mark pier,  $7\frac{1}{2}$  miles north of station, on road allowance along east boundary of sec. 21-24-29, 3 feet east of west limit of road allowance and 13 feet south of northeast corner of sec. 21, bolt set vertically. No. 626-C. Elevation 2248 104.

Concrete bench-mark pier, 4 miles southeast of station and 700 feet east of mile post 108 from Java, on a piece of flat ground about 200 feet in length between two knolls through which the railway cuts, 4 feet north of southerly limit of right of way, bolt set vertically. No. 367-D. Elevation 1961 947.

Bridge over South Saskatchewan river  $6\frac{1}{2}$  miles southeast of station, in south face of east concrete abutment. 20 inches below rail level, bolt set horizontally. No. 368-D. Elevation 1938 134.

Concrete bench-mark pier,  $3\frac{1}{2}$  miles southwest of station, 875 feet easterly from road allowance along east boundary of sec. 9-23-1 and 4 feet north of southerly limit of right of way, bolt set vertically. No. 364-D. Elevation 1971 702.

**Ensign;** C.P. Ry. Section house, 630 feet southeast of station, in northeast or front concrete foundation wall, 10 feet from northerly corner and 8 inches below woodwork, bolt set horizontally. No. 66-D. Elevation 3265 530.

**Entrance;** C.N. Ry. Rock cut, 1 mile southwest of station and at mileage 61.2 from Edson, on a quarter-mile section of straight track immediately northeast of point where track crosses abandoned Grand Trunk Pacific Ry. grade, bolt set horizontally in east side of cut, 20 feet from south end and 1 foot below track level. No. 93-H. Elevation 3292 544.

Vertical rock exposure, 4 miles southwest of station, 20 feet east of abandoned Grand Trunk Pacific Ry. grade, directly opposite C.N. Ry. bridge over Athabasca river at mileage 64.1 from Edson and 350 feet south of the more southerly of two rock cuts, bolt set horizontally in west face of rock, 12 feet from north end and level with railway grade. No. 94-H. Elevation 3305 849.

Concrete bench-mark pier, 8 miles southwest of station and 28 feet west of abandoned Grand Trunk Pacific Ry. grade, at a point  $\frac{1}{2}$  mile north of site of Parkgate station and directly across Brule lake from mile post 69 from Edson bolt set horizontally in north side of pier. No. 95-H. Elevation 3305 596.

**Entwistle;** C.N. Ry. See Evansburg, B.M. No. 72-H.

**Equity;** C.N. Ry. See Three Hills, B.M. No. 54-H.

**Erskine;** C.P. Ry. Public school, in east concrete foundation wall, 15 inches from southeast corner and 2 feet below brickwork, bolt set horizontally. No. Z-10. Elevation 2684 992.

Concrete bench-mark pier,  $2\frac{1}{2}$  miles west of station and 6 feet west of first pole west of mile post 67 from Coronation, 33 feet east of a whistle post for westbound trains, at eighteenth pole east of road allowance along east boundary of sec. 33-38-21 and 3 feet north of southerly limit of right of way, bolt set vertically. No. Z-9. Elevation 2658 519.

**Evansburg;** C.N. Ry. Steel trestle bridge over Pembina river,  $\frac{1}{2}$  mile east of station, in south end of west face of east concrete abutment, 4 feet 8 inches above bridge seat, bolt set horizontally. No. 72-H. Elevation 2556 523.

**Excel;** C.N.Ry. Concrete bench-mark pier, 2 miles west of station and 14 feet west of thirteenth pole west of mile post 73 from Kindersley, 346 feet westerly from road allowance along east boundary of sec 15-28-5 and 2 feet south of northerly limit of right of way, tablet in top of pier No. S-88. Elevation 2865 449.

**Excelsior;** N.A.Ry. See Carbondale, B.M. No. V-1.

**Esshaw;** C.P.Ry. Plate girder bridge at east end of passing-track and at mile post 57 from Calgary, in north end of west face of east concrete abutment, 3 feet above bridge seat, bolt set horizontally No. 231-C. Elevation 4250-937.

Concrete arch culvert, 3½ miles west of station and at mileage 60.5 from Calgary, in west end of south face, 1 foot below top, bolt set horizontally. No. 232-C. Elevation 4236-612.

**Fabyan;** C.N.Ry. Steel trestle viaduct over Battle river, 3 miles west of station, in south face of south concrete retaining wall at east end of viaduct, bolt set horizontally in vertical face, 2 feet below lower end of sloping portion. No. 37-H. Elevation 2067 987

**Falls;** C.N.Ry. Concrete bench-mark pier, 1½ miles west of station and 23 feet east of seventeenth pole east of mile post 54 from Edmonton, at the east side of a gully which crosses the track near the centre of a long clay cut, 6 feet easterly from road allowance along east boundary of sec 17-53-5 and 36 feet south of track, bolt set horizontally in north side of pier No. 70-H. Elevation 2433 915.

**Fawcett;** N.A.Ry. Concrete bench-mark pier, 2½ miles southeast of station and 45 feet north of twelfth pole north of mile post 79 from junction with C.N.Ry., 615 feet north of bridge at mileage 79.3 and 4 feet east of westerly limit of right of way, tablet in top of pier No. U-21. Elevation 2030 275.

Concrete bench-mark pier, 1 mile northwest of station and 50 feet north of fourth pole north of mile post 83 from junction with C.N.Ry., ¼ mile northerly from road allowance along east boundary of sec. 17-64-1 and 3 feet east of westerly limit of right of way, tablet in top of pier. No. U-22. Elevation 2053 891

**Federal;** C.P.Ry. Concrete bench-mark pier, ¼ mile west of station and 27 feet east of fifth pole west of mile post 6 from Coronation, 3 feet north of southerly limit of right of way, bolt set vertically No. Z-26. Elevation 2604-725.

**Fedorah;** N.A.Ry. Concrete bench-mark pier, 3½ miles south of station and 76 feet north of fourth pole north of mile post 13 from Carbondale, 142 feet south of a private crossing and 2 feet west of easterly limit of right of way, bolt set vertically No. V-3. Elevation 2123 266

Concrete bench-mark pier, 1 mile south of station and 63 feet south of sixteenth pole south of mile post 16 from Carbondale, 1,880 feet south of a private crossing and 4 feet west of easterly limit of right of way, bolt set vertically. No. V-4. Elevation 2161 040.

**Forintosh;** C.N.Ry. N. Bawlf Grain Company's engine house, in north concrete foundation wall, 3 feet 8 inches from northeast corner and 6 inches below metal sheathing, bolt set horizontally No. 67-F. Elevation 2470 491.

**Fincastle;** C.P.Ry. See Taber, B.M. No. 185-C.

**Flatbush, C N Ry** Concrete bench-mark pier 1 mile north of station and 16 feet north of eleventh pole north of mile post 94 from junction with C N Ry or tenth pole north of a bridge 41 feet east of track, bolt set vertically. No. U-35. Elevation 2004 588.

Concrete bench-mark pier 4 miles north of station and 38 feet north of tenth pole north of mile post 97 from junction with C N Ry, 61 feet east of track bolt set vertically. No. U-36. Elevation 1905 830.

**Fleet, C P Ry** Concrete bench-mark pier 2½ miles southwest of station and 30 feet west of thirteenth pole west of mile post 10 from Cremona, ½ mile westerly from east boundary of sec. 32-30-12 and 2 feet south of northerly limit of right of way bolt set vertically. No. E-25. Elevation 2679 676.

Concrete bench-mark pier 1 mile west of station and 65 feet east of fourth pole east of mile post 14 from Cremona ½ mile easterly from east boundary of sec. 10-37-13 and 2 feet south of northerly limit of right of way bolt set vertically. No. E-34. Elevation 2735 470.

**Fort Saskatchewan, C N Ry** Public school in southeast stone foundation wall of rear or rear section 1 foot from easterly corner and 3 feet below bench-mark bolt set horizontally. No. L-6. Elevation 3051 073.

Iron pipe 8 in. with concrete 3½ miles northeast of station and 60 feet east of second pole east of mile post 109 from Vermilion, 700 feet east of a private crossing and 3 feet south of northerly limit of right of way bolt set vertically. No. L-6. Elevation 2063-557.

Combined highway and railway bridge over North Saskatchewan river 1½ miles southwest of station tablet in top of most westerly concrete pier, near west end of highway deck and 2 feet 6 inches from north end of pier. No. L-4. Elevation 2007 201.

**Frank, C P Ry** Triple concrete culvert, 100 feet east of station, southwest face of culvert in wall between centre and westerly arches, 3 feet 6 inches below top of concrete bolt set horizontally. No. 103-D. Elevation 4307 876.

**Geddy, C P Ry** Royal Bank, in ledge of concrete foundation of east or front wall midway between the two windows and 3 inches from brickwork, bolt set vertically. No. E-16. Elevation 2656 672.

Iron pipe in ground, 2½ miles east of station, 170 feet east of bridge at mileage 38 4 from Cremona and 3 feet north of northerly limit of right of way brass cap on top of pipe. No. E-17. Elevation 2640 726.

**Gairford, C N Ry** Water tank ½ mile east of station in south face of concrete foundation wall 2 feet to the right of the spout and 1 foot below wood-work bolt set horizontally. No. 71-M. Elevation 2443 442.

**Galloway, C N Ry** See Marlboro B M No. 25-H.

**Gap, C P Ry** Concrete box culvert ½ mile east of station and at mileage 61 6 from Calgary in west face of east abutment, 15 inches north of north face of culvert and 21 inches below top of water passage, bolt set horizontally. No. 233-C. Elevation 4237-010.

**Gartly, C N Ry** Concrete bench-mark pier 1 mile northeast of east switch and opposite seventh pole east of mile post 33 from Hanna, 694 feet east of east mile sign 3 020 feet easterly from road allowance along north boundary of sec. 11-30-10 and 2 feet north of northerly limit of right of way bolt set vertically. No. R 123. Elevation 2748 987.

Concrete bench-mark pier 2½ miles northwest of west switch and 8 feet east of sixth pole east of mile post 36 from Hanna, 60 feet east of a private crossing, 2 027 feet westerly from road allowance along east boundary of sec. 20-30-10 and 2 feet south of northerly limit of right of way, tablet in top of pier. No. B-134. Elevation 2010 083.

**Gethie; C N Ry** Steel truss bridge over Mætte river,  $\frac{1}{4}$  mile east of station, in south end of east face of west concrete abutment, 4 feet 4 inches above bridge seat bolt set horizontally No. 107-H Elevation 3577 935

Rock cut, 2 $\frac{1}{2}$  miles east of station and 33 feet west of tenth pole east of mile post 6 from Jasper,  $\frac{1}{4}$  mile east of a tunnel bolt set horizontally in north side of cut, at track level No. 106-H Elevation 3544 746

**Gibbons; C N Ry** See Fedorah, B M No. V-3.

**Gilburn; C N Ry** See Patricia, B M No. 344-D.

**Glenbow; C P Ry** Concrete box culvert, 2 $\frac{1}{2}$  miles east of station and at mileage 15 6 from Calgary, in east end of north face, 15 inches below top, bolt set horizontally No. 221-C Elevation 3625 303

**Granger; C N Ry** Concrete bench-mark pier, 4 $\frac{1}{2}$  miles southwest of station and 10 feet south of sixth pole north of mile post 84 from Mirror or ninth pole south of road allowance along north boundary of sec 11-29-25, 5 feet west of easterly limit of right of way, bolt set horizontally in northwest side of pier No. 49-F. Elevation 2943 013.

**Grants; C P Ry** Concrete bench-mark pier, 2 $\frac{1}{2}$  miles southeast of station and 60 feet south of mile post 4 from Bassano, immediately east of east limit of road allowance along east boundary of sec 1-22-19 and 5 feet west of easterly limit of right of way bolt set vertically No. 305-D Elevation 2677 128.

Concrete bench-mark pier 1 $\frac{1}{2}$  miles northwest of station and at eighth pole north of mile post 3 from Bassano, 140 feet southerly from road allowance along east boundary of sec 22-22-19 and 5 feet west of easterly limit of right of way, bolt set vertically No. 304-D Elevation 2745 972.

**Grantum; C P Ry** See Woodhouse, B M No. CC-15.

**Grassy Lake; C P Ry** Public school, in north or front foundation wall, 3 feet 4 inches from northeast corner and 5 feet 6 inches below brickwork, bolt set horizontally No. 183-C Elevation 2657 788.

E. C. Jones general store, in concrete foundation of west side wall, 7 feet 6 inches from southwest corner and 15 inches below brickwork, bolt set horizontally No. 182-C Elevation 2649 591

**Greenshields; C N Ry** Concrete bench-mark pier, 1 mile southeast of station and 35 feet east of twelfth pole west of mile post 134 from Biggar 33 feet west of east mile sign, 235 feet east of a whistle post for westbound trains and 6 feet south of northerly limit of right of way, bolt set horizontally in north side of pier No. 35-H Elevation 2232 539

**Gwynne; C P Ry** Plate girder bridge over Pipestone creek,  $\frac{1}{4}$  mile west of station and at mileage 87 2 from Hardisty, in north end of west face of east concrete abutment, 2 feet 9 inches above bridge seat, bolt set horizontally. No. 677-C. Elevation 2297 687

**Halkirk; C P Ry** Alberta-Pool navvies, in east concrete foundation wall, 1 foot from southeast corner and 3 feet 6 inches below woodwork, bolt set horizontally No. Z-19 Elevation 2737 332

Concrete bench-mark pier 4 $\frac{1}{2}$  miles west of station and 8 feet east of fourteenth pole east of mile post 38 from Coronation or fifteenth pole west of road allowance along east boundary of sec 29-38-18, 3 feet north of southerly limit of right of way, bolt set vertically No. Z-18. Elevation 2038 230.

**Halsbury, C P Ry** Concrete bench-mark pier, 2½ miles northeast of station and at mileage 50.8 from Lampson, 18 feet easterly from road allowance along east boundary of sec. 29-31-8 and 3 feet south of northerly limit of right of way, bolt set vertically. No. 352-D. Elevation 2523.943.

**Hamlet, C P Ry** See Tudor, B M No. 294-D

**Hanna; C N Ry** Fundamental bench-mark in triangular plot of land at southeast corner of Main street and road allowance along north boundary of sec. 9-31-14. 52 feet south of south limit of above road allowance and 23 feet east of easterly limit of Main street. tablet in top of pier. No. 820-C. Elevation 2689.447.

Memorial hall, tablet in south or front concrete foundation wall, 3 feet from southeast corner and 3 feet below brickwork. No. 821-C. Elevation 2684.964.

Public school, a brick building with field stone foundation. on east side of First street east, between Fifth and Sixth avenues. in west stone foundation wall 7 inches from southwest corner and 2 feet 8 inches below base of water-table course. bolt set horizontally. No. 8-109. Elevation 2689.277.

Canadian Bank of Commerce, in east or Main street wall 8 inches from southeast corner and second course of brickwork above concrete foundation. bolt set horizontally. No. 8-110. Elevation 2685.245.

Brace Walters mens furnishing store, at southwest corner of First street west and Second avenue. in triangular concrete step at corner entrance. 5 feet from right angled corner of step and 3 inches from east edge, bolt set vertically. No. 8-111. Elevation 2682.875.

Roundhouse, in north concrete foundation wall, 1 foot from northeast corner and 3 inches above ledge, bolt set horizontally. No. 8-112. Elevation 2671.792.

Concrete bench-mark pier, 2½ miles east of station and 30 feet west of fourth pole west of mile post 134 from Kindersley, 220 feet east of a whistle post for eastbound trains, 870 feet westerly from road allowance along east boundary of sec. 11-31-14 and 2 feet north of southerly limit of right of way, tablet in top of pier. No. 8-108. Elevation 2701.800.

Concrete bench-mark pier, 2 miles west of station and 396 feet east of mile post 2. 360 feet west of a small trestle and 2 feet south of northerly limit of right of way, tablet in top of pier. No. 8-113. Elevation 2648.022.

**Hardieville; C P Ry** See Lethbridge, B M No. 196-C

**Hargwen; C N Ry** See Medicine Lodge, B M No. 86-H

**Hawkins; C N Ry** See Fabryan, B M No. 37-H

**Hentburg; C N Ry** See Ardley, B M No. 60-F

**Henth; C N Ry** Section house, 250 feet east of east switch of passing-track, in south or front concrete foundation wall, 8 inches from southwest corner and 4 inches below woodwork, bolt set horizontally. No. 34-H. Elevation 2185.664.

**Henry House; C N Ry** Steel truss bridge over Bear River, 1½ miles north of station and at mileage 96.4 from Edson, in north face of south concrete abutment. 1 foot west of east truss and 4 feet 4 inches above bridge seat, bolt set horizontally. No. 101-H. Elevation 3316.749.

Subway Edmonton-Jasper highway under railway, 1½ miles south of station and at mileage 99.4 from Edson, in west end of north face of south concrete abutment, 4 feet 5 inches above bridge seat, bolt set horizontally. No. 102-H. Elevation 3345.275.

\*Subsequent inspection of this bench mark indicates that the elevation may not be precise.

**High River; C.P.Ry.** Plate girder bridge over Highwood river,  $\frac{1}{2}$  mile north of station, tablet in top of ballast wall on north concrete abutment, 10 inches from west edge and 9 inches from south edge of wall. No. CC-2. Elevation 3405 684.

Plate girder bridge over Tongueflag creek, 3 miles north of station and at mileage 35 7 from Twelfth street east, Calgary, in bridge seat of north concrete abutment, 6 inches from west edge and 8 inches from south edge; bolt set vertically. No. CC-1. Elevation 3400 919.

Concrete box culvert,  $1\frac{1}{2}$  miles south of station and between tenth and eleventh poles south of mile post 40 from Twelfth street east, Calgary, in top of coping on west end of culvert, 10 inches from north end of coping; bolt set vertically. No. CC-3. Elevation 3399 139.

**Hillcrest; C.P.Ry.** See Frank, B.M. No. 102-D.

**Hilliard; C.N.Ry.** Iron pipe filled with concrete, 1,850 feet northwest of station and 35 feet west of mile post 78 from Vermilion, 3 feet south of northerly limit of right of way, top of pipe (no bolt). No. L-15. Elevation 2268 937.

**Hinton; C.N.Ry.** Circular concrete base of inlet pipe housing of dismantled water tank, bolt set horizontally, facing south. No. 91-H. Elevation 3320 878.

Note: A section tool house has been constructed on the site of this tank and the bench mark is presumably just beneath the floor.

Steel trestle bridge over Maskuta creek, 8 miles southwest of station and at mileage 58 1 from Edson, in south end of east face of west concrete abutment, 4 feet 6 inches above bridge seat, bolt set horizontally. No. 92-H. Elevation 3265 301.

**Hobbema; C.P.Ry.** Office building of Department of Indian Affairs, on Erminebank Indian reserve,  $\frac{1}{2}$  mile north of station and 500 feet west of railway, in north concrete foundation wall, 14 inches from northwest corner and 4 inches below woodwork, bolt set horizontally. No. H-40. Elevation 2622 634.

Concrete bench-mark pier,  $2\frac{1}{2}$  miles southwest of station and 57 feet south of sixth pole north of mile post 44 from Red Deer, 3 feet east of westerly limit of right of way; bolt set vertically. No. H-39-A. Elevation 2584 545.

**Holden; C.N.Ry.** Public school, in southeast or front concrete foundation wall, 22 inches from southerly corner and 4 feet 6 inches below brickwork; bolt set horizontally. No. 46-H. Elevation 2264 184.

**Hondo; N.A.Ry.** Concrete bench-mark pier,  $1\frac{1}{2}$  miles northeast of station and 60 feet north of fourth pole north of mile post 124 from junction with C.N.Ry., 300 feet south of bridge at mileage 124 2 and 42 feet east of track, bolt set vertically. No. U 33. Elevation 1926 922.

Concrete bench-mark pier,  $2\frac{1}{2}$  miles southwest of station and 55 feet south of first pole north of mile post 120 from junction with C.N.Ry., 44 feet east of track, bolt set vertically. No. U-32. Elevation 1960 009.

Concrete bench-mark pier,  $6\frac{1}{2}$  miles southwest of station and 25 feet north of ninth pole north of mile post 116 from junction with C.N.Ry., 41 feet west of track, bolt set vertically. No. U-31. Elevation 1984 539.

**Hubalta; C.N.Ry.** Buckeye Machine Company's shop, a large brick building  $\frac{1}{2}$  mile northeast of station and immediately northwest of railway, in southeast concrete foundation wall, 17 inches from southerly corner and 8 inches below brickwork, bolt set horizontally. No. 41-F. Elevation 3472-420.

**Hussey; C P Ry** Concrete bench-mark pier, 3 miles northwest of station and 100 feet east of mile post 24 from Bassano, at crossing of road allowance along north boundary of sec. 21-24-20 and 4 feet south of northerly limit of right of way, bolt set vertically No. 300-D Elevation 2941 339.

**Huxley; C N Ry** Concrete bench-mark pier, 1½ miles north of station and 60 feet south of seventh pole north of mile post 42 from Mirror or twelfth pole north of road allowance along north boundary of sec. 20-34-23, 15 feet south of a private crossing and 5 feet east of westerly limit of right of way; bolt set horizontally in north side of pier No. 56-F. Elevation 2925 500.

**Hylo; N A Ry.** Concrete bench-mark pier, 1½ miles west of station and 23 feet east of seventeenth pole west of mile post 99 from Carbondale, 10 feet south of northerly limit of right of way, tablet in top of pier No. V-27. Elevation 1906 001.

**Iddesleigh, C P Ry** Concrete bench-mark pier, ¼ mile northeast of station and at mileage 62.9 from Empress, 50 feet northerly from road allowance along east boundary of sec. 34-20-10, at the north end of a deep cut and 5 feet west of easterly limit of right of way, bolt set vertically. No. 348-D. Elevation 2577 595.

Concrete bench-mark pier, 2½ miles east of station and at mileage 60.65 from Empress, 1,020 feet easterly from road allowance along east boundary of sec. 36-20-10 and 90 feet north of track, bolt set vertically. No. 349-D. Elevation 2532 917.

Concrete bench-mark pier, 4 miles southwest of station and at mileage 67.2 from Empress, immediately south of a private crossing and 5 feet east of westerly limit of right of way, bolt set vertically No. 347-D. Elevation 2535 275.

**Innisfail; C P Ry** Canadian Bank of Commerce, at corner of Pine and Alberta streets, in stone foundation of Pine street wall, 5 feet 6 inches from front corner and 2 feet 2 inches below woodwork; bolt set horizontally No. H-24. Elevation 3107-390.

Large concrete arch culvert, 3½ miles southwest of station and at mileage 71.8 from Twelfth street east, Calgary, tablet in top of coping on east end of culvert, 5 inches from south end of coping. No. H-23. Elevation 3076-497.

**Innisfree, C N Ry** Canadian Bank of Commerce, in east concrete foundation wall, 2 feet from northeast corner and 16 inches below woodwork, bolt set horizontally No. L-27 Elevation 2235 231

Iron pipe filled with concrete, 4½ miles southeast of station and 65 feet west of thirteenth pole west of mile post 27 from Vermilion, 2 feet north of southerly limit of right of way, bolt set vertically. No. L-28. Elevation 2148 942.

**Inverlake; C P Ry** See Norfolk, B M No. 8-160.

**Irris; C N Ry** Water tank, 2½ miles southeast of station, in north face of concrete foundation wall, 2 feet 6 inches to the left of the spout and 3 inches below woodwork, bolt set horizontally No. 38-H Elevation 2198 400.

Engine house of United Grain Growers' elevator No. 89, in north concrete foundation wall, 8 inches from northeast corner and 4 inches below metal sheathing, bolt set horizontally. No. 39-H. Elevation 2241 283.

**Irricana; Fundamental bench mark,** about ½ mile southeast of town, ½ mile south of C P Ry (Irricana-Bassano line), 120 feet north of northeast corner of sec. 16-27-26 and 3 feet east of west limit of road allowance, tablet in top of pier. No. 46-F-2. Elevation 3059 437.

**Irviana—Continued**

Alberta-Pacific elevator No 99 at C P Ry station in south concrete foundation wall 18 feet from southwest corner and 9 inches below metal flashing bolt set horizontally No 290-13 Elevation 3096 787

Concrete bench mark pier 2 miles east of C P Ry station and at mileage 70.1 from Hanna 60 feet westerly from road allowance along east boundary of sec 22-27-26 and 2 feet north of southerly limit of C P Ry right of way tablet in top of pier No 290-13-2 Elevation 3024 135

Concrete box culvert under C N Ry 2½ miles south of station and at mile post 100 from Mirror in centre of east face 8 inches below top bolt set horizontally No 46 F Elevation 3026 301

**Irvine, C P Ry** Public school in south stone foundation wall 8 inches from southwest corner and 22 inches below concrete plinth bolt set horizontally No 160-C Elevation 2500 500

Nail's Ark Block southwest of the station in stone foundation of east side wall 6 inches from southwest corner and 6 inches below brickwork bolt set horizontally No 150-4 Elevation 2511 135

Plate girder bridge 5½ miles east of station and at mileage 120.4 from Swift Current in south end of east face of west concrete abutment 19 inches below bridge seat bolt set horizontally No 137-4 Elevation 2461 337

Plate girder bridge 2 miles west of station and at mileage 127.6 from Swift Current in south end of east face of west concrete abutment 8 inches below top bolt set horizontally No 161-4 Elevation 2479 997

Plate girder bridge 3 miles west of station and at mileage 128.6 from Swift Current in south end of west or rear face of west concrete abutment, 6 inches below top, bolt set horizontally No 162-4 Elevation 2465 741

**Jalny, C N Ry** Concrete bench-mark pier 1,800 feet east of station and 63 feet west of eleventh pole west of mile post 100 from North Battleford, 460 feet east of east switch of passing track 30 feet east of a gate in right of way fence and 5 feet north of southerly limit of right of way tablet in top of pier No L-42 Elevation 2001 510

Iron pipe piled with concrete 5½ miles southeast of station and 7 feet west of third pole east of mile post 104 from North Battleford, 625 feet east of a whistle post for west-bound trains and 3 feet south of southerly limit of right of way bolt set vertically No 1-43 Elevation 2125 576

Concrete bench mark pier 1,040 feet west of station and 40 feet east of mile post 110 from North Battleford, 300 feet westerly from road allowance along east boundary of sec 8-51-4 and 3 feet south of southerly limit of right of way tablet in top of pier No L-41 Elevation 2001 549

**Jamieson, C P Ry** Concrete box culvert 800 feet west of west switch and at mileage 98.8 from Dunmore in south face of culvert immediately above west wing wall bolt set horizontally No 190-4 Elevation 2739 632

**Jenet, C N Ry** Concrete bench-mark pier 1½ miles west of west switch and at fourteenth pole west of mile post 128 from Hanna, 205 feet easterly from road allowance along east boundary of sec 26-23-20 and 2 feet north of southerly limit of right of way bolt set vertically No 8-170 Elevation 2422 311

**Jarrow, C N Ry** Concrete bench-mark pier 1 mile southeast of station and 50 feet east of fifth pole west of mile post 34 from Wainwright, 130 feet westerly from road allowance along north boundary of sec 34-43-10 and 7 feet south of southerly limit of right of way bolt set horizontally in north-east end of pier No 40-H Elevation 2237 317



**Jarvis; N A Ry.** Concrete bench-mark post 1 mile north of station and 70 feet south of eleventh pole north of main post 75 from junction with C N Ry., 66 feet southerly from road allowance along north boundary of sec. 23-43-37 and 4 feet west of easterly limit of right of way tablet in top of post No. U-30. Elevation 2013 545.

Concrete bench-mark post 2½ miles south of station and 50 feet south of eleventh pole south of main post 72 from junction with C N Ry. 380 feet north of a road crossing and 10 feet east of westerly limit of right of way, tablet in top of post No. L 19. Elevation 2022 914.

**Jasper, C N Ry.** Jasper Park administration building immediately northwest of station. Buttress at southwest corner of one-story extension at north end of building. Butt set horizontally in south face of large stone at base of buttress. N 104 H. Elevation 1483 686.

Concrete bench-mark post 2½ miles southwest of station, 1,200 feet east of a fence and 49 feet north of track. Butt set horizontally in north side of post. No. 105 H. Elevation 1504 206.

Gravel park side cut at west side of track 3½ miles north of station and 100 feet south of main post. (B) from station 825 feet north of a bridge on Edmonton-Jasper highway, which parallels the railway. Butt set horizontally in a projection of rock facing north. 70 feet from south end of cut and 1 foot above track level. No. 103 H. Elevation 1420 783.

Wooden trestle bridge over Athabasca river on Edmonton-Jasper highway. 2½ miles north of town and ½ mile northeast of railway crossing, in northwest end of southwest face of northeast concrete abutment 5 feet above bridge seat. Butt set horizontally. No. 100-H. Elevation 3303 086.

Rock side cut at east side of Edmonton-Jasper highway 17 miles north of town and ½ mile northeast of site of Interlake station in smooth vertical face about 4 feet long and 2 feet in height. 150 feet from south end of cut. Butt set horizontally about 1 foot above road surface facing Jasper lake. No. 99-H. Elevation 3296 081.

Wooden trestle bridge over Rocky river on Edmonton-Jasper highway, 21½ miles north of town and ½ mile north of site of Hawes station in west end of north face of north concrete abutment 5 feet above bridge seat. Butt set horizontally. No. 98 H. Elevation 1243 835.

Long curved rock cut on Edmonton-Jasper highway 24½ miles north of town. 2½ miles southwest of abandoned Pellymonte road mine and ½ mile north of an abandoned lime kiln in east side of cut. 150 feet from south end and 1 foot above road surface. Butt set horizontally. No. 97 H. Elevation 3267 129.

Discontinued Grand Trunk Pacific Ry. bridge over Lubile creek 30½ miles (S. Edmonton-Jasper highway) north of town. 2 miles northeast of intersection of railway grade with highway and 1½ miles downstream from highway bridge on south end of west face of east concrete abutment, 4 feet 2 inches above bridge seat. Butt set horizontally. No. 96-H. Elevation 3252 395.

See also Henry House.

**Jenner, C P Ry.** Station in northwest concrete foundation wall, 9 feet north-east of rear entrance and 5 inches below woodwork. Butt set horizontally. No. 350-D. Elevation 2478 365.

Concrete bench-mark post 2 miles northeast of station and at milepost 55.6 from Empress. 48 feet west of a private crossing about ½ mile westerly from east boundary of sec. 11 21-8 and 5 feet south of northerly limit of right of way, butt set vertically. No. 351 D. Elevation 2472 367.

**Jenkins; C N Ry.** See Letestak, D.M. No. 73-H.

**Kanumukin;** C.P. Ry. See Seebe, B.M. No. 230-C and  
Exshaw, B.M. No. 231-C.

**Kapostwin;** C.N. Ry. See Wabamun, B.M. No. 69-H.

**Kathryn;** C.N. Ry. Concrete box culvert,  $\frac{1}{2}$  mile northeast of station and at mileage 105.9 from Mirror, between fifth and sixth poles northerly from road allowance along east boundary of sec. 16-26-27, in north end of south-east face, 8 inches below top bolt set horizontally. No. 44-F. Elevation 3198.532.

Concrete box culvert  $3\frac{1}{2}$  miles northeast of station and at mileage 103.1 from Mirror, at fourth pole northerly from road allowance along east boundary of sec. 26-26-27, in centre of west face 8 inches below top bolt set horizontally. No. 45-F. Elevation 3114.498.

**Kavanagh;** C.P. Ry. Concrete bench-mark pier, 1 mile north of station and 20 feet north of fourth pole south of mile post 74 from Red Deer, 85 feet northerly from road allowance along north boundary of sec. 36-48-25 and 3 feet east of westerly limit of right of way, bolt set vertically. No. H-45-A. Elevation 2492.003.

**Kerensky;** C.N. Ry. Concrete bench-mark pier, 1 mile east of station and 30 feet west of sixth pole west of mile post 38 from St. Paul Junction, 2,495 feet westerly from road allowance along east boundary of sec. 19-58-21 and 3 feet south of northerly limit of right of way, bolt set vertically. No. DD-1. Elevation 2098.801.

Concrete bench-mark pier 3 miles east of station and 1 foot east of first pole east of mile post 38 from St. Paul Junction, 1,665 feet westerly from road allowance along east boundary of sec. 21-58-21 and 3 feet south of northerly limit of right of way bolt set vertically. No. DD-2. Elevation 2159.261.

**Kilroyth;** N.A. Ry. Concrete bench-mark pier,  $3\frac{1}{2}$  miles north of station and 45 feet south of third pole north of mile post 90 from junction with C.N. Ry. about 1,800 feet north of bridge at mileage 99.7 and 10 feet east of westerly limit of right of way, tablet in top of pier. No. I-34. Elevation 2042.563.

Concrete bench-mark pier,  $\frac{1}{2}$  mile south of station and 57 feet south of thirteenth pole north of mile post 86 from junction with C.N. Ry., at the north end of a long tangent, 430 feet southerly from road allowance along north boundary of sec. 1-65-2 and 6 feet east of westerly limit of right of way, tablet in top of pier. No. U-23. Elevation 2055.117.

**Kingman;** C.N. Ry. Public school, tablet in north concrete foundation wall, 16 inches from northeast corner and 6 inches below woodwork. No. 174-F-2. Elevation 2446.984.

Farm house owned by Olof Skajin, on northwest  $\frac{1}{2}$  sec. 19-48-19,  $3\frac{1}{2}$  miles south of station and 200 feet east of railway, tablet in west concrete foundation wall, 14 inches from southwest corner and 3 inches below woodwork. No. 73-F-2. Elevation 2463.096.

Concrete bench-mark pier, 1 mile south of station and at mile post 13 from Tofteld, 35 feet north of a private crossing and 4 feet east of westerly limit of right of way, bolt set horizontally in north side of pier. No. 74-F. Elevation 2453.159.

**Kininvia;** C.P. Ry. Concrete bench-mark pier,  $\frac{1}{2}$  mile east of station and at mileage 43.4 from Medicine Hat, 6 feet north of southerly limit of right of way and 220 feet west of a whistle post for westbound trains for road crossing at end of passing track, bolt set vertically. No. 323-D. Elevation 2443.782.

**Kinsella; N A Ry** Concrete bench-mark pier, 1 mile southeast of south switch and 98 feet north of ninth pole north of mile post 252 from Carbondale, 148 feet north of south mile-sign and 49 feet east of track, bolt set vertically No. V-69. Elevation 1524 801.

Concrete bench-mark pier  $2\frac{1}{2}$  miles northwest of north switch and 50 feet south of first pole north of mile post 256 from Carbondale, 70 feet southerly from north boundary of sec 14-85-7 and 50 feet east of track; bolt set vertically No. V-70 Elevation 1526 313

**Kinsella; C N Ry** Red granite boulder, about 5 feet by 3 feet,  $1\frac{1}{2}$  miles northwest of station and at seventh pole west of mile post 33 from Wainwright or at fourth pole east of a road crossing, 57 feet south of northerly limit of right of way bolt set horizontally No. 41-H Elevation 2301 851

**Kipp; C P Ry** Section house 500 feet northwest of station, in northeast concrete foundation wall, 21 inches from easterly corner and 10 inches below woodwork, bolt set horizontally No. 81-D Elevation 3057 944.

**Kirkcaldy; C P Ry** Section house, in southwest or front concrete foundation wall, 11 feet from southerly corner and 8 inches below woodwork, bolt set horizontally No. 70-D Elevation 3321 625

**Kirriemuir; C P Ry** Concrete bench-mark pier, 3 miles east of station and 40 feet east of fourth pole east of mile post 56 from Kerrobert, about 500 feet west of a private crossing and 3 feet south of northerly limit of right of way, bolt set vertically No. Z-42 Elevation 2358 331

Concrete bench-mark pier  $1\frac{1}{2}$  miles west of station and at mileage 60.2 from Kerrobert at east limit of road allowance along east boundary of sec. 15-34-3 and 13 feet north of northerly limit of right of way, bolt set vertically No. Z-41. Elevation 2352-375.

**Kitscoty; C N Ry** Iron pipe filled with concrete  $3\frac{1}{2}$  miles southeast of station and 60 feet west of ninth pole east of mile post 96 from North Battleford, 300 feet east of a whistle post for westbound trains and 2 feet south of northerly limit of right of way bolt set vertically No. L-45 Elevation 2235 390

**Kneehill; C P Ry** See Drumheller, B.M. No. 8-130

**Lac la Pêche, N A Ry** Water tank, 700 feet northeast of station, bolt set vertically near southerly corner of concrete valve chamber, 10 inches from southwest edge and 10 inches from southeast edge No. V-31 Elevation 1838 817

Concrete bench-mark pier, 3 miles northeast of station and 11 feet east of mile post 116 from Carbondale, 1,110 feet westerly from road allowance along east boundary of sec 9-67-13 and 4 feet south of northerly limit of right of way, tablet in top of pier No. V-32 Elevation 1877 494

Concrete bench-mark pier,  $\frac{1}{2}$  mile southwest of station and 88 feet north of sixth pole north of mile post 112 from Carbondale 420 feet southerly from road allowance along north boundary of sec 36-66-14, 980 feet southerly from another road crossing and 3 feet west of easterly limit of right of way, tablet in top of pier No. V-30 Elevation 1793 316

**Lacombe; C P Ry** Bank of Montreal, in north stone foundation wall, 17 inches from northwest corner and 4 inches above sidewalk bolt set horizontally No. H-34-B Elevation 2798 139

Campbell block, a two-story brick building on north side of Burns street, about 100 yards west of railway, in south concrete foundation wall, midway between easterly and westerly entrances and 15 inches below brickwork, bolt set horizontally. No. H-34-A. Elevation 2797 897.

**Lacombe—Concluded**

Day block, a one-story brick building at southwest corner of Burns and Railway streets, in concrete foundation of east side wall, 33 feet from south line of Burns street and 8 inches below brickwork, bolt set horizontally. No. H-34. Elevation 2797.686.

Concrete box culvert under Calgary-Edmonton line,  $3\frac{1}{2}$  miles northeast of station and at mileage 21.8 from Red Deer tablet in top of coping on east end of culvert, 6 inches from north end of coping. No. H-35. Elevation 2764.144.

Concrete bench-mark pier on Coronation line, 4 miles east of station and 70 feet east of ninth pole east of mile post 103 from Coronation or fifteenth pole east of road allowance along east boundary of sec. 27-40-26, 66 feet east of a whistle post for westbound trains and 5 feet north of southerly limit of right of way, tablet in top of pier. No. Z-1. Elevation 2923.739.

**Lake Louise; C P Ry.** Round house, now disused, directly opposite station, in east or rear wall, 8 feet 6 inches from southeast corner and first course of stonework above water table, bolt set horizontally. No. 249-C. Elevation 5054.696.

Plate girder bridge over Pipestone creek,  $\frac{1}{2}$  mile southeast of station, in south end of southeast face of west stone abutment, second course above bridge seat, bolt set horizontally. No. 248-C. Elevation 5045.347.

Double concrete culvert 3 miles southeast of station and at mileage 113.5 from Calgary, in west end of south face, 18 inches below top, bolt set horizontally. No. 247-C. Elevation 4967.261.

Plate girder bridge over Bow river,  $1\frac{1}{2}$  miles northwest of station and at mileage 117.8 from Calgary, in north face of west concrete abutment, 4 feet below bridge seat, bolt set horizontally. No. 250-C. Elevation 5077.768.

Plate girder bridge over Bath creek,  $1\frac{1}{2}$  miles northeast of Stephen, B.C., and at mileage 121.2 from Calgary, in south end of east face of west concrete abutment, 15 inches above bridge seat, bolt set horizontally. No. 251-C. Elevation 5282.451.

Interprovincial boundary monument between Alberta and British Columbia, at "The Great Divide,"  $\frac{1}{2}$  mile east of Stephen, B.C. and 110 feet south of track, in north face of concrete base, bolt set horizontally. No. 252-C. Elevation 5344.167.

**Lamerton; C N Ry.** See Murro, B.M. No. 63-F.

**Lamont; C N Ry.** D. R. Davis Grain Company's elevator, 300 feet west of station, in north face of concrete foundation under west wall, 2 inches below metal sheathing, bolt set horizontally. No. L-11. Elevation 2139.810.

Iron pipe filled with concrete, 4 miles southeast of station and 8 feet west of sixth pole east of mile post 89 from Vermilion, 3 feet south of northerly limit of right of way, bolt set vertically. No. L-12. Elevation 2168.454.

**Larline, C N Ry.** Concrete bench-mark pier, 840 feet west of west switch and 9 feet west of fourteenth pole west of mile post 77 from Kindersley, 1,683 feet easterly from road allowance along east boundary of sec. 12-28-6 and 2 feet south of northerly limit of right of way, tablet in top of pier. No. 8-89. Elevation 2637.807.

**Larmour; C P Ry.** Plate girder bridge,  $\frac{1}{2}$  mile west of station and at mileage 120.4 from Swift Current, in south end of east face of west concrete abutment, 19 inches below bridge seat, bolt set horizontally. No. 157-C. Elevation 2461.337.

**Latham; C P Ry** Concrete box culvert,  $2\frac{1}{2}$  miles southeast of station and at mileage 87.4 from Medicine Hat, in centre of southwest face, bolt set horizontally. No. 310-D. Elevation 2533.111.

Plate girder bridge over irrigation canal  $\frac{1}{2}$  mile northwest of station and at mileage 90.2 from Medicine Hat, in south end of northwest face of east concrete abutment, 9 inches above bridge seat, bolt set horizontally, No. 309-D. Elevation 2559.904.

**Lavey, C N Ry** Iron pipe filled with concrete, 1,520 feet southeast of station and 8 feet east of fourth pole east of mile post 48 from Vermilion, 265 feet easterly from road allowance along north boundary of sec. 33-51-13 and 3 feet south of northerly limit of right of way, bolt set vertically. No. L-23. Elevation 2203.087.

Iron pipe filled with concrete  $4\frac{1}{2}$  miles southeast of station and 50 feet west of fourteenth pole west of mile post 43 from Vermilion, 1,090 feet easterly from road allowance along east boundary of sec. 25-51-13 and 3 feet south of northerly limit of right of way, bolt set vertically. No. L-24. Elevation 2253.157.

**Leaman; C N Ry** Water tank,  $1\frac{1}{2}$  miles west of station, in south face of concrete foundation wall, 3 inches below woodwork and directly beneath the spout, bolt set horizontally. No. 76-H. Elevation 2609.427.

**Leduc; C P Ry** Public school, in east concrete foundation wall, 3 feet 6 inches from northeast corner and 3 feet 6 inches below brickwork, bolt set horizontally. No. H-45-B. Elevation 2399.001.

Colquhoun block, at northeast corner of Main and North Freeman streets, in south or front wall, 14 inches from southwest corner and 13 inches above sidewalk, bolt set horizontally in stonework. No. H-46. Elevation 2395.700.

Concrete bench-mark pier, 3 miles north of station and 75 feet south of first pole south of mile post 82 from Red Deer, 470 feet south of Calgary-Edmonton highway crossing and 3 feet west of easterly limit of right of way, bolt set vertically. No. H-46-A. Elevation 2369.799.

**Lehmer; N A Ry** Concrete bench-mark pier,  $\frac{1}{2}$  mile northeast of north switch and 10 feet west of second pole west of mile post 204 from Cardondale, 35 feet west of a long shallow cut on a curve and 52 feet north of track, bolt set vertically. No. V-56. Elevation 1793.949.

Concrete bench-mark pier,  $4\frac{1}{2}$  miles northeast of north switch and 93 feet east of mile post 204 from Cardondale, 70 feet west of the east end of a cut and of the beginning of a curve and 51 feet north of track, bolt set vertically. No. V-57. Elevation 1639.689.

Concrete bench-mark pier,  $3\frac{1}{2}$  miles southwest of south switch and 80 feet south of mile post 200 from Cardondale, 1,280 feet south of a small cut, about midway between crossings of north boundary of sec. 25-77-8 and east boundary of sec. 36-77-8 and 47 feet west of track, bolt set vertically. No. V-55. Elevation 1800.236.

**Lenarthur; N A Ry** Concrete bench-mark pier,  $1\frac{1}{2}$  miles north of north switch and 80 feet south of mile post 268 from Cardondale, about  $\frac{1}{2}$  mile northerly from north boundary of sec. 9-87-7 and 48 feet west of track, bolt set vertically. No. V-73. Elevation 1435.308.

Concrete bench-mark pier,  $1\frac{1}{2}$  miles south of south switch and 75 feet south of eleventh pole north of mile post 264 from Cardondale, 575 feet southerly from north boundary of sec. 28-86-7 and 50 feet west of track, bolt set vertically. No. V-72. Elevation 1617.456.

**Lethbridge; C.P.Ry.** Fundamental bench mark in Galt Gardens, 23 feet west of inner edge of sidewalk on Seventh street and 97 feet north of inner edge of sidewalk on Third avenue tablet on top of pier No. 814-C. Elevation 2982.478.

Nicholas Sherman monument, erected by Historic Sites and Monuments Board of Canada in Galt Gardens, tablet at centre of west or rear face of concrete base 4 inches below top. No. 813-C. Elevation 2980.470.

Post office, in west or Seventh street wall, 17 feet from northwest corner and fifth course of stonework below water table bolt set horizontally. No. 197-C. Elevation 2976.150.

Court house in east face of pilaster at southeast corner of rear wall, bolt set horizontally at centre of granite plinth. No. 198-C. Elevation 2978.399.

Court house, in stone parapet at south side of steps at main entrance, metal bracket attached to west face of first stone above concrete wall. Elevation 2978.732.

Wesley United church, at northwest corner of Fourth avenue and Eleventh street in east side wall, 11 feet 6 inches from front of church and third course of stonework below water table, bolt set horizontally. No. 199-C. Elevation 2994.165.

Station in south or rear stone foundation wall, 4 feet 6 inches from southeast corner and third course below brickwork, bolt set horizontally. No. 196-C. Elevation 2994.674.

Stock building (C) at exhibition grounds immediately west of railway, in north concrete foundation wall 12 feet from northeast corner bolt set horizontally. No. 200-C. Elevation 2992.166.

Double concrete culvert  $3\frac{1}{2}$  miles east of station and at mileage 106.1 from Dunmore opposite Liberty east mile sign in west end of south face, 8 inches below top bolt set horizontally. No. 195-C. Elevation 2990.999.

Steel trestle viaduct over Oldman river west of the station in south end of west face of east concrete abutment 20 inches above ledge seat, bolt set horizontally. No. 83-D. Elevation 2990.618.

In same viaduct as bench mark No. 83-D in north end of east face of west concrete abutment 20 inches above bridge seat bolt set horizontally. No. 82-D. Elevation 3001.519.

**Lindbrook; C.N.Ry.** Concrete bench-mark pier 1 mile northwest of station and 23 feet east of fourth pole east of mile post 93 from Wainwright, 460 feet east of a wooden trestle and 35 feet south of northerly limit of right of way (in line with telegraph poles) bolt set horizontally in northeast side of pier. No. 82-H. Elevation 2426.215.

**Lloydminster; C.N.Ry.** Concrete pier, 2 feet 8 inches square and standing 4 feet above ground (constructed for astronomical observations), 700 feet west of station and 60 feet south of track top of pier, at southeast corner, unmarked. No. B-3. Elevation 2125.268.

Concrete bench-mark pier 2 100 feet east of station and 45 feet west of mile post 84 from North Battleford; 105 feet west of west switch of an elevator track and 3 feet north of southerly limit of right of way tablet on top of pier. No. F-45. Elevation 2109.183.

**Lohatich; C.N.Ry.** Concrete bench-mark pier  $\frac{1}{2}$  mile west of station and 4 feet north of southerly limit of right of way of Edmonton-Jasper highway, opposite a point on railway at fourteenth pole west of mile post 74 from Edmonton 330 feet west of a private crossing and  $\frac{1}{2}$  mile westerly from east boundary of sec. 20-53-8 bolt set horizontally in north side of pier. No. 73-H. Elevation 2586.920.

The bench mark is slightly below the surface of the sidewalk on Seventh street, some may be led to it by a small chamber fixed with an iron cover.

\*City Engineer's Department B.M. No. 16.

**Lemana;** C N Ry J W Smith's general store, 600 feet east of the station, in centre of west face of large boulder which supports northwest corner of building, bolt set horizontally No 58-F Elevation 2986 361

**Loyalist;** C P Ry Concrete bench-mark pier, 1 mile east of station and 80 feet west of sixteenth pole east of mile post 93 from Kerrobert, 320 feet west of a culvert and 3 feet south of northerly limit of right of way, bolt set vertically No Z-34 Elevation 2508 392.

Concrete bench-mark pier,  $3\frac{1}{2}$  miles west of station and at mileage 96.9 from Kerrobert, 75 feet west of fifth pole west of road allowance along east boundary of sec 11-35-8 and 3 feet south of northerly limit of right of way, bolt set vertically No Z-33 Elevation 2567 703.

**Lundbreck;** C P Ry Concrete arch culvert,  $1\frac{1}{2}$  miles east of station and at second pole west of mile post 71 from Lethbridge, in north face of culvert, 16 inches from east end and 3 feet below top, bolt set horizontally No. 98-D. Elevation 3870 042.

Bridge over Crosscut river,  $2\frac{1}{2}$  miles west of station and at mile post 75 from Lethbridge in west face of east concrete abutment, 2 feet above bridge seat and almost in line with northerly truss, bolt set horizontally No. 99-D. Elevation 3820 777.

**Lynda;** C N Ry Steel truss bridge over C P Ry irrigation canal,  $1\frac{1}{2}$  miles east of station and at mileage 109.8 from Hanna, in top of north concrete retaining wall at east end of bridge, 15 inches from west end of wall and 19 inches from north edge bolt set vertically No 8-157 Elevation 3131 737.

Concrete bench-mark pier,  $2\frac{1}{2}$  miles east of station and 22 feet east of thirteenth pole east of mile post 109 from Hanna, 700 feet west of a trestle over a creek 2.325 feet westerly from road allowance along east boundary of sec 10-25-26 and 2 feet south of northerly limit of right of way, tablet in top of pier. No. 8-156. Elevation 3105 446.

Concrete bench-mark pier  $1\frac{1}{2}$  miles southwest of station and 10 feet east of thirteenth pole west of mile post 117 from Hanna, 130 feet east of a concrete tie culvert 595 feet east of a private crossing, 2,300 feet easterly from road allowance along east boundary of sec 1-25-27 and 2 feet south of northerly limit of right of way, tablet in top of pier No 8-158. Elevation 3188 397

**Lynton;** N A Ry Concrete bench-mark pier,  $2\frac{1}{2}$  miles south of south switch and 24 feet north of third pole north of mile post 273 from Carbondale, 435 feet north of a bridge over a stream and 51 feet west of track, bolt set vertically No. V-74. Elevation 1309 543.

Concrete bench-mark pier  $1\frac{1}{2}$  miles northwest of north switch and 40 feet west of fourth pole west of mile post 276 from Carbondale or of thirteenth pole west of a galvanized iron pipe culvert, 50 feet west of west end of a curve and 49 feet north of track, bolt set vertically No. V-75. Elevation 1226-057

**Mackay;** C N Ry See Leaman, B.M. No. 76-H and  
Niton, B.M. No. 77-H.

**Macleod;** C P Ry Fundamental bench mark in court house square, 68 feet east of inner edge of sidewalk on Second avenue and in line with War Memorial monument, Fort Macleod monument and centre line of Twenty-second street tablet in top of pier No 811-C Elevation 3107 634.

Fort Macleod monument, erected by Historic Sites and Monuments Board of Canada, in court house square, tablet at centre of east or rear face of concrete base, 4 inches below top. No. 812-C Elevation 3100 807.

**Macleod—Concluded**

Court house, in north face of corner stone at northeast corner, third course below water table bolt set horizontally No 87-D Elevation 3105 321

Public school in north or front stone foundation wall 20 inches west of northeast corner of west wing and third course below water table, bolt set horizontally No 88-D Elevation 3112 634

**Magnolia, C N Ry** See (Stanford B.M. No 71 H)

**Majestic, C P Ry** Concrete bench-mark pier  $\frac{1}{2}$  mile west of station and at mileage 39.9 from Lampson, 270 feet easterly from road allowance along east boundary of sec 36-21-7 and 6 feet south of northerly limit of right of way bolt set vertically No 355-D Elevation 2430 755

**Makopuce, C P Ry** Alberta Pacific Grain Company's elevator in north-west concrete foundation wall of unloading room, 7 feet from westerly corner and 6 inches below metal sheathing bolt set horizontally No. 303-D Elevation 2849 773

Concrete bench-mark pier  $\frac{3}{4}$  miles northwest of station and at mile post 16 from Bassano, 4 feet east of road allowance along east boundary of sec 24-23-30 and 210 feet south of intersection of track with east limit of road allowance bolt set vertically No 302-D Elevation 2834 092

**Manville, C N Ry** Iron pipe 5 led with concrete 2 000 feet east of station and at seventh pole west of mile post 14 from Vermilion, 990 feet east of east switch of passing track and 4 feet north of southerly limit of right of way bolt set vertically No. L-31 Elevation 2050 468

Iron pipe 5 led with concrete  $\frac{3}{4}$  miles east of station and 50 feet north of fifth pole north of mile post 11 from Vermilion, 1 190 feet north of bridge at mileage 11.1 and 3 feet west of easterly limit of right of way bolt set vertically. No. L-32 Elevation 2021 526

**Margie, N A Ry** Concrete bench-mark pier, 2 miles north of station and 20 feet north of sixth pole south of mile post 176 from Cardonville, 1,670 feet northerly from road allowance along north boundary of sec 33-74-9 and 50 feet east of track bolt set vertically No. V-49 Elevation 2186 118

Concrete bench-mark pier  $\frac{1}{2}$  miles south of south switch and 57 feet north of seventh pole south of mile post 172 from Cardonville, 2 140 feet northerly from road allowance along north boundary of sec 33-74-9 and 48 feet west of track bolt set vertically No. V-48 Elevation 2170 948

Concrete bench-mark pier  $\frac{5}{8}$  miles south of south switch and 40 feet north of sixth pole north of mile post 168 from Cardonville, 420 feet southerly from north boundary of sec 30-73-9 and 37 feet east of track bolt set vertically. No. V-47 Elevation 2149 676

**Marlboro, C N Ry** Concrete bench-mark pier  $\frac{3}{4}$  miles southwest of station and between eighth and ninth poles west of mile post 18 from Edson, between two cuts which are about 700 feet apart 36 feet south of track, bolt set horizontally in north side of pier No 85-H Elevation 3243 407

**Maximo, C P Ry** See Sawback B.M. No 242-C and  
Castle Mountain, B.M. No 243-C

**Mexoppa, C P Ry** Section house in north or front concrete foundation wall, 3 feet 6 inches from northwest corner and 4 inches below woodwork, bolt set horizontally No 61-D-2 Elevation 3280 504

**McMurray, N.A.Ry** See Draper, B.M. No. V-78.



**McNab; C P Ry** Concrete bench-mark pier, 1 mile south of station and 42 feet north of fifteenth pole south of mile post 17 from Stirling, 520 feet north of a bridge and 4 feet east of westerly limit of right of way, bolt set horizontally in north side of pier No. 208-C Elevation 3205 556

**Mearns, N A Ry** Concrete bench mark pier, 1½ miles southeast of station and 90 feet west of mile post 27 from junction with C N Ry, 3,100 feet westerly from road allowance along east boundary of sec 22-56-26 and 3 feet north of southerly limit of right of way, tablet in top of pier. No. U-8. Elevation 2359 596

**Medicine Hat; C P Ry** Fundamental bench mark in Central park. The pier is in grass border of circular flower bed, 110 feet south of south limit of Ninth street and 68 feet west of west limit of Third avenue. Tablet in top of pier. No. 816-C. Elevation 2304 836.

Post office, in stone foundation of southwest or Sixth avenue wall, immediately northwest of central entrance and third course below brick-work, bolt set horizontally No. 167-4. Elevation 2185 744

Fifth avenue United church, tablet in top of projecting portion of concrete foundation of Fourth street wall, 7 feet northeast of vestry doorway, 21 inches northeast of a buttress and 1 foot from main wall of building. No. 815-C. Elevation 2240 993.

Station in northwest end wall, 6 inches from front corner and third course of stonework below water table, bolt set horizontally. No. 169-C. Elevation 2182 833

Railway bridge over South Saskatchewan river northwest of station, in northwest face of southeast concrete abutment, 2 feet 8 inches from upstream end of abutment, bolt set horizontally at track level No. 168-C. Elevation 2184 170.

Roman Catholic church, in northeast wall of northeast transept, 14 inches northwest of buttress which is nearest to front of church and 6 inches below basement window sills, bolt set horizontally in concrete. No. 334-D. Elevation 2178 868.

**Medicine Lodge; C N Ry** Water tank, in northwest face of concrete foundation wall, 3 feet 6 inches to the right of the spout and 5 inches below wood-work, bolt set horizontally No. 86-H Elevation 3390 303.

**Melastoe, C P Ry** Bridge over Oldman river, ½ mile southeast of station; bolt set vertically in top of centre pier, 23 inches from west or upstream end and midway between north and south edges. No. CC-19 Elevation 3112 498

**Menalik; C P Ry** Concrete bridge, ¼ mile north of station and at mileage \* 40 7 from Red Deer, tablet in top of west wall, 13 inches from north end. No. H-39. Elevation 2020 141

**Meseum; C P Ry** Concrete box culvert, at east switch of passing-track and at mileage 48 4 from Medicine Hat, in centre of southwest face, 14 inches below top, bolt set horizontally. No. 321-D. Elevation 2461 064.

**Michichi; C N Ry** Concrete bench-mark pier, 1½ miles northeast of station and 30 feet east of eleventh pole east of mile post 29 from Hanna, 363 feet west of a trestle over a creek, 1,105 feet easterly from road allowance along east boundary of sec 19-30-18 and 2 feet south of northerly limit of right of way, tablet in top of pier No. S-122 Elevation 2782 310.

\*When inspected in 1928, it was found that the head of the tablet had been broken off and only a portion of the shank remained, the elevation must not, therefore, be considered precise.

**Midnapore, C. P. Ry.** Bridge over Fish creek,  $\frac{1}{2}$  mile north of station, in southeast face of east concrete wing wall at north end of bridge, 3 feet 4 inches from end of abutment and 2 feet 9 inches above bridge seat, bolt set horizontally No. 54-D Elevation 3413 000.

(concrete bench-mark) 2 $\frac{1}{2}$  miles north of station and at mileage 6.1 from Twelfth street east (algary) in south face of coping on west end of culvert bolt set horizontally No. 53-D Elevation 3435 134.

Boulder about 18 feet by 7 feet  $1\frac{1}{2}$  miles south of station 600 feet south of mile post 10 from Twelfth street east (algary) and 6 feet east of westerly limit of right of way in west face of boulder 9 feet from south end and 18 inches above ground bolt set horizontally No. 55-D Elevation 3429 341.

**Miss River, C. P. Ry.** H. L. Thomson's general store formerly office of Canadian Bank of Commerce, in concrete foundation of east side wall 7 feet 3 inches from southeast corner and 8 inches below woodwork bolt set horizontally No. 213-C Elevation 3437-812.

Abandoned highway bridge over Miss river west of railway in north-east face of east concrete wing wall on north bank of river bolt set horizontally 8 feet 6 inches below coping No. 214-C Elevation 3409 685.

(concrete bench-mark) 1 mile north of station 5 feet east of westerly limit of right of way and 9 feet north of fourteenth pole south of mile post 33 from Stirling which mile post is the fourth pole north of north mile sign bolt set horizontally in north side of pier No. 213-C Elevation 3467 129.

(concrete bench-mark) 6 miles south of station and 55 feet south of fifteenth pole south of mile post 60 from Stirling, 8 feet east of westerly limit of right of way bolt set horizontally in north side of pier No. 213-C Elevation 3425-928.

**Misses, C. P. Ry.** Concrete bench-mark pier, 2 $\frac{1}{2}$  miles north of station and at mileage 69.1 from Red Deer 100 feet northerly from road allowance along east boundary of sec. 7-48-24 and 3 feet west of westerly limit of right of way bolt set vertically No. 603-4 Elevation 3479 603.

Plate girder bridge over Pipestone creek 1 mile south of station and at mileage 65.7 from Red Deer tablet in top of ballast wall on south concrete abutment 3 feet 8 inches from east end of wall No. H-44 Elevation 3468 300.

(concrete bench-mark) 3 $\frac{1}{2}$  miles south of station and 20 feet south of eleventh pole north of mile post 63 from Red Deer, 100 feet northerly from road allowance along north boundary of sec. 9-47-24 and 3 feet east of westerly limit of right of way bolt set vertically No. 602-4 Elevation 3488-102.

**Millicent, C. P. Ry.** (concrete bench-mark) 15 feet west of east mile sign and at seventeenth pole west of mile post 85 from Empress, 220 feet west of a whistle post for eastward trains and 6 feet south of northerly limit of right of way, bolt set vertically No. 342-D Elevation 2383 247.

**Minburn, C. N. Ry.** Iron pipe filled with concrete 1,850 feet northwest of station and 5 feet west of sixth pole west of mile post 23 from Vermilion, 620 feet west of west switch of passing track 315 feet westerly from road allowance along east boundary of sec. 15-50-10 and 3 feet north of westerly limit of right of way bolt set vertically No. L-29 Elevation 2080 235.

(iron pipe filled with concrete) 4 $\frac{1}{2}$  miles east of station and 30 feet west of eleventh pole east of mile post 19 from Vermilion, 530 feet easterly from road allowance along east boundary of sec. 20-50-8 and 3 feet north of southerly limit of right of way, bolt set vertically No. L-30 Elevation 2088 345.

**Mirror; C.N.Ry** Water tank, in east face of concrete foundation wall, 10 inches below woodwork and 2 feet to the right of the spout, bolt set horizontally. No. 63-F. Elevation 2602 575.

**Mitford; C.P.Ry** Steel truss bridge over Bow river, 2 miles east of station and at mileage 25.7 from Calgary, in north face of concrete coping on north retaining wall at east end of bridge, 20 inches from west end of wall, bolt set horizontally. No. 234-C. Elevation 3727 314.

**Mitsus; N.A.Ry** Concrete bench-mark pier,  $1\frac{1}{2}$  miles east of station and 9 feet west of second pole east of mile post 156 from junction with C.N.Ry., 1,800 feet west of a water tank, 1,250 feet easterly from road allowance along east boundary of sec. 25-72-5 and 37 feet north of track, bolts set vertically. No. U-44. Elevation 1914 479.

**Monarch; C.P.Ry** Demolished building formerly occupied by Canadian Bank of Commerce, 115 feet east and 500 feet south of station, in west face of concrete foundation wall 4 feet 2 inches from southwest corner and 10 inches below top, bolt set horizontally. No. 84-D. Elevation 3102 050.  
Steel trestle viaduct over Okman river, 4 miles west of station, in west face of south concrete retaining wall at east end of Viaduct. 21 inches above bridge seat, bolt set horizontally. No. 85-D. Elevation 3074 873.

**Monitor; C.P.Ry** Water tank,  $\frac{1}{2}$  mile east of station, in north face of concrete foundation wall, 3 feet 5 inches to the right of the spout and 3 inches below woodwork, bolt set horizontally. No. Z-38. Elevation 2208 768.  
Concrete bench-mark pier,  $\frac{4}{5}$  miles west of station and at mileage 79.5 from Kerrobert, 10 feet east of third pole west of subway carrying road allowance along east boundary of sec. 5-35-5 and 3 feet north of southerly limit of right of way, bolt set vertically. No. Z-37. Elevation 2298 062.

**Motrilville; N.A.Ry** Concrete bench-mark pier, 3 miles northwest of station and 17 feet east of tenth pole east of mile post 23 from junction with C.N.Ry.,  $2\frac{1}{2}$  miles northwest of C.N.Ry. diamond crossing, 76 feet west of a private crossing, 1,500 feet westerly from road allowance along east boundary of sec. 6-56-25 and 3 feet north of southerly limit of right of way, tablet in top of pier. No. U-7. Elevation 2324 091.

**Murley; C.P.Ry** Concrete box culvert, 2 miles northeast of station and at mileage 39.7 from Calgary, in east face of north face-wall, 7 inches below top, bolt set horizontally. No. 226-C. Elevation 4062 867.  
Concrete bench-mark pier  $1\frac{1}{2}$  miles southwest of station and 105 feet west of mile post 43 from Calgary, 135 feet west of west mile sign and 5 feet south of northerly limit of right of way, bolt set horizontally in north side of pier. No. 227-C. Elevation 4076 455.

**Morningside; C.P.Ry** Section house, in east concrete foundation wall, 1 foot from northeast corner and 1 foot below woodwork, bolt set horizontally. No. H-36. Elevation 2811 856.  
Concrete bench-mark pier, 4 miles southwest of station and 55 feet south of twenty-fourth pole north of mile post 23 from Red Deer, 295 feet south of Lochnivar north mile sign, 3,000 feet southerly from road allowance along north boundary of sec. 9-41-26 and 3 feet west of easterly limit of right of way, bolt set vertically. No. H-36-A. Elevation 2772 041.

**Mundare; C.N.Ry** Iron pipe filled with concrete, 1,880 feet east of station, 765 feet east of east switch of passing track and 4 feet south of northerly limit of right of way, bolt set vertically. No. L-17. Elevation 2286 296.

**Mundare—Concluded**

Iron pipe filled with concrete,  $3\frac{1}{2}$  miles southeast of station and 70 feet west of sixteenth pole west of mile post 67 from Vermilion, 1,515 feet east of a private crossing and 4 feet north of southerly limit of right of way, bolt set vertically No. L-18 Elevation 2212 904

Iron pipe filled with concrete, 3 miles northwest of station and close to mile post 74 from Vermilion, 3 feet north of southerly limit of right of way, bolt set vertically No. L-16 Elevation 2257 737

**Munson; C N Ry** Public school, in south stone foundation wall, 7 inches from southwest corner and 6 inches below woodwork, bolt set horizontally. No. 8-127. Elevation 2707 479.

Concrete bench-mark pier,  $2\frac{1}{2}$  miles northeast of station and 14 feet west of tenth pole east of mile post 39 from Hanna, 292 feet easterly from road allowance along east boundary of sec 23-30-20 and 2 feet south of northerly limit of right of way, tablet in top of pier No. S-125 Elevation 2630 147

Concrete bench-mark pier,  $1\frac{1}{2}$  miles southwest of station and 66 feet east of tenth pole east of mile post 43 from Hanna, 400 feet west of a private crossing  $\frac{1}{2}$  mile easterly from east boundary of sec 9-30-20 and 2 feet south of northerly limit of right of way, tablet in top of pier No. S-128. Elevation 2613 552

**Munson Junction; C N Ry** See Munson, B M. No. 8-125

**Nanton; C P Ry** Red brick business block at westerly corner of Shaw St. and Railway avenue, in stone foundation of northeast or Railway avenue wall, 37 feet 6 inches from corner entrance to bank of Nova Scotia and 1 foot below brickwork, bolt set horizontally No. CC-6 Elevation 3368 960

Plate girder bridge over Mosquito creek, 2 miles northwest of station and at mileage 53.9 from Twelfth street east, Calgary, bolt set vertically in top of ballast wall on south concrete abutment, 9 inches from west edge and 6 inches from south edge of wall No. CC-5 Elevation 3355 860

Concrete arch culvert, 4 miles southeast of station and between fourth and fifth poles south of mile post 60 from Twelfth street east, Calgary, 3,000 feet north of Durward north switch, bolt set vertically in top of coping on west end of culvert, 7 inches from south end of coping No. CC-7 Elevation 3348 876

**Neville; C P Ry** Concrete bench-mark pier 1 mile north of station and 42 feet south of fifteenth pole north of mile post 52 from Red Deer, or thirteenth pole north of road allowance along north boundary of sec 22-45-24 and 3 feet east of westerly limit of right of way, bolt set vertically No. H-41 Elevation 2506 518

**Norris; C P Ry** See Erskine, B M. No. Z-9, and  
Aix, B M. No. Z-7.

**Newbrook; N.A. Ry** Concrete bench-mark pier, 1 mile south of station and 31 feet south of second pole north of mile post 52 from Carbondale, 2,500 feet north of crossing of Waakatenau creek and 3 feet west of easterly limit of right of way, tablet in top of pier No. V-14. Elevation 2199 157

**New Dayton, C P Ry** Public school, in east or front concrete foundation wall, 11 feet from northeast corner and 20 inches below woodwork, bolt set horizontally No. 207-C Elevation 3210 399

Residence of Dr. Caty, formerly office of Canadian Bank of Commerce, in concrete foundation of east side wall, 2 feet 6 inches from south-east corner and 14 inches below woodwork, bolt set horizontally. No. 206-C. Elevation 3196 102.

Concrete bench-mark pier, 3 miles northwest of station and 63 feet south of twelfth pole south of mile post 7 from Stirling, 4 feet east of westerly limit of right of way, bolt set horizontally in northwest side of pier. No. 205-C. Elevation 3187 450.

**New Norway; C N Ry** Pioneer Grain Company's elevator, in south concrete foundation wall, 2 feet from southwest corner and 4 inches below metal sheathing bolt set horizontally. No. 68-F. Elevation 2456 967.

Farm house owned by E. M. Fankhael, on northeast  $\frac{1}{2}$  sec. 33-44-21, about  $2\frac{1}{2}$  miles south of station and 300 yards east of railway, tablet in north concrete foundation wall, 16 inches from northwest corner and 8 inches below woodwork. No. 67-F-2. Elevation 2496 879.

**Nightingale; C P Ry** Alberta-Pacific Grain Company's elevator, in north-west concrete foundation wall, 2 feet 10 inches northeast of driveway at southwest side of elevator and 6 inches below metal sheathing, bolt set horizontally. No. 793-D. Elevation 2949 860.

**Nisku; C P Ry** Plate girder bridge over Blackmud creek, 3 miles north of station and at mileage 87.2 from Red Deer, tablet in bridge east of south concrete abutment, 6 inches from east edge and 8 inches from north edge. No. H-47. Elevation 2268 958.

**Niton; C N Ry** Concrete bench-mark pier, 2 miles east of station and 3 feet east of fifteenth pole east of mile post 98 from Edmonton, 40 feet north of track, bolt set horizontally in north side of pier. No. 77-H. Elevation 2701 493.

**Noblesford; C P Ry** Section house, 600 feet north of station, in east or front concrete foundation wall, 11 feet from northeast corner and 7 inches below woodwork bolt set horizontally. No. 79-D. Elevation 3221 261.

Concrete bench-mark pier,  $1\frac{1}{2}$  miles north of station and 60 feet north of sixth pole north of mile post 12 from Kipp, about 1700 feet northerly from road allowance along north boundary of sec. 10-11-23 and 7 feet east of westerly limit of right of way, bolt set horizontally in north side of pier. No. 78-D. Elevation 3203 145.

**Nolan; C P Ry** Concrete box culvert, 190 feet north of station, in top of coping on east end of culvert, 10 inches from south end of coping, bolt set vertically. No. CC-18. Elevation 3182 244.

Plate girder bridge over Willow creek,  $1\frac{1}{2}$  miles north of station and at mileage 98.1 from Twelfth street east, Calgary, in bridge east of north concrete abutment, 10 inches from east edge and 19 inches from south edge of east, bolt set vertically. No. CC-17. Elevation 3162 186.

**Normal; N A Ry** Concrete bench-mark pier, 2 miles northeast of station and 17 feet west of first pole east of mile post 96 from Carbondale, about 600 feet west of a curve and 39 feet north of track, tablet in top of pier. No. V-26. Elevation 1979 854.

Concrete bench mark pier, 1 mile west of station and 62 feet west of fifth pole east of mile post 92 from Carbondale, at the east end of a fill about 900 feet in length and 39 feet north of track, tablet in top of pier. No. V-25. Elevation 1994 842.

**Norfolk; C N Ry** Concrete box culvert,  $\frac{1}{2}$  mile northeast of east switch and at mileage 117.7 from Hanna, in centre of top of coping on north end of culvert, bolt set vertically. No. H-163. Elevation 3315 944.

Plate girder bridge over C P Ry irrigation canal,  $\frac{1}{2}$  mile northeast of east switch and at mileage 117.4 from Hanna, bolt set vertically in centre of top of north concrete retaining wall at east end of bridge, 14 inches from east end of wall. No. B-162. Elevation 3313 890.

**Norfolk—Concluded**

Concrete box culvert, 1 mile northeast of east switch and at mileage 117.1 from Hanna,  $\frac{1}{2}$  mile westerly from east boundary of sec. 22-24-27; bolt set vertically in top of coping on north end of culvert, 9 inches from east end of same No. 8-161 Elevation 3304 149.

- Concrete bench-mark pier, 2 miles northeast of east switch and 8 feet east of seventh pole west of mile post 115 from Hanna, 2 feet south of northerly limit of right of way, bolt set vertically No. 8-160 Elevation 3285 114.

Concrete box culvert,  $\frac{1}{2}$  mile southwest of west switch and at mile post 119 from Hanna, 645 feet easterly from road allowance along north boundary of sec. 9-24-27, bolt set vertically in top of coping on north end of culvert, 9 inches from east end of same No. 8-164 Elevation 3311 467.

Concrete box culvert,  $1\frac{1}{2}$  miles southwest of west switch and at mileage 119.7 from Hanna, bolt set vertically in top of coping on north end of culvert, 1 foot from east end of same No. 8-165 Elevation 3335 991.

Concrete bench-mark pier  $1\frac{1}{2}$  miles southwest of west switch and 18 feet east of ninth pole west of mile post 120 from Hanna, 530 feet easterly from road allowance along east boundary of sec. 7-24-27 and 2 feet north of southerly limit of right of way, tablet in top of pier No. 8-166 Elevation 3337 522.

**North Edmonton; C N Ry.** Home semaphore beside main line track,  $\frac{1}{2}$  mile east of station and 550 feet east of diamond crossing of Viking and Vegreville subdivisions of C N Ry, tablet in top of concrete footing, at south-west corner of same No. 57-H-2 Elevation 2157 442.

**Obed; C N Ry.** Concrete bench-mark pier,  $1\frac{1}{2}$  miles east of station, 56 feet west of mile post 34 from Edson and 60 feet south of track, on top of a gently sloping bank about 300 feet east of a curve, bolt set horizontally in north side of pier No. 87-H Elevation 3558 481.

**Okotoks; C P Ry.** Bridge over Sheep river, 1 mile southeast of station and at mileage 27.3 from Twelfth street east, Calgary, in southwest face of west concrete wing wall at north end of bridge, directly in line with westerly truss and 2 feet 8 inches above bridge seat, bolt set horizontally No. 60-D Elevation 3429 382.

Plate girder bridge,  $1\frac{1}{2}$  miles northwest of station and at mileage 24.5 from Twelfth street east, Calgary, in south end of east face of west concrete abutment, 2 feet 8 inches above bridge seat, bolt set horizontally No. 59-D Elevation 3486 695.

**Olde; C P Ry.** Canadian Bank of Commerce, sandstone facing of front wall, 16 feet 4 inches south of main entrance and 13 inches above sidewalk, bolt set horizontally in projection, facing south. No. H-20 Elevation 3412 388.

**Oliver; C N Ry.** Iron pipe filled with concrete, 2,070 feet southwest of station and 42 feet west of fourth pole west of mile post 122 from Vermilion, 815 feet west of west switch of passing-track and 3 feet south of northerly limit of right of way, bolt set vertically No. L-2 Elevation 2139 658.

**Opal; N A Ry.** Water tank, 3 miles northeast of station and at mileage 26.5 from Carbondale, in southeast face of concrete foundation, 4 feet 4 inches from corner nearest track and 10 inches below woodwork, bolt set horizontally. No. V-7 Elevation 2001 807.

\* This bench mark was not found during the inspection of 1936.

**Ouelles; N.A. Ry.** Concrete bench-mark pier,  $1\frac{1}{2}$  miles east of station and 55 feet east of ninth pole east of mile post 149 from junction with C.N. Ry., 55 feet easterly from road allowance along east boundary of sec. 30-72-8 and 42 feet north of track, bolt set vertically. No. U-42. Elevation 1953 098.

Concrete bench-mark pier,  $1\frac{1}{2}$  miles west of station and 55 feet west of ninth pole east of mile post 152 from junction with C.N. Ry., 620 feet easterly from road allowance along east boundary of sec. 22-72-4 and 43 feet north of track, bolt set vertically. No. U-43. Elevation 1941 240.

**Owlsaye, C.N. Ry.** Concrete bench-mark pier,  $3\frac{1}{2}$  miles southeast of station and 16 feet east of second pole east of mile post 116 from St. Paul Junction, 1,270 feet easterly from road allowance along north boundary of sec. 23-58-10 and 3 feet south of northerly limit of right of way, bolt set vertically. No. DD-25. Elevation 2182 717.

Concrete bench-mark pier 1 mile northwest of station and 60 feet east of third pole west of mile post 112 from St. Paul Junction, 1,710 feet easterly from north boundary of sec. 4-59-10 and 4 feet south of northerly limit of right of way, bolt set vertically. No. DD-24. Elevation 2165 067.

**Oyam; C.N. Ry.** Alberta hotel at southeast corner of the main street and first street south of railway, in north concrete foundation wall, 2 feet from northeast corner of main building and 3 inches below woodwork, bolt set horizontally. No. S-86. Elevation 2519 482.

Concrete bench-mark pier,  $1\frac{1}{2}$  miles east of station and 18 feet east of fifteenth pole east of mile post 66 from Kindersley, 53 feet east of east mile sign, 1,570 feet westerly from road allowance along east boundary of sec. 35-27-4 and 2 feet south of northerly limit of right of way, tablet in top of pier. No. S-85. Elevation 2485 800.

Concrete bench-mark pier,  $2\frac{1}{2}$  miles northwest of station and 7 feet east of twelfth pole west of mile post 69 from Kindersley, 517 feet easterly from road allowance along east boundary of sec. 6-28-4 and 2 feet south of northerly limit of right of way, tablet in top of pier. No. S-87. Elevation 2556 748.

**Parkland, C.P. Ry.** Concrete box culvert,  $2\frac{1}{2}$  miles south of station and at mile post 67 from Twelfth street east, Calgary, bolt set vertically in top of coping on east end of culvert, 6 inches from south end of same. No. CC-9. Elevation 3432-881.

Concrete arch culvert,  $2\frac{1}{2}$  miles northwest of station and at fifth pole north of mile post 62 from Twelfth street east, Calgary, 240 feet southerly from road allowance along north boundary of sec. 19-15-27, bolt set vertically in top of coping on east end of culvert, 7 inches from south end of coping. No. CC-8. Elevation 3402 229.

**Pashley; C.P. Ry.** Double concrete culvert, 1 mile east of station and at mileage 131.6 from Swift Current, in south face of culvert, immediately above west wing-wall, bolt set horizontally. No. 163-C. Elevation 2425 721.

**Pemburg; C.P. Ry.** Vertical rock surface, 1 mile northwest of station and 120 feet west of mile post 83 from Lethbridge, 330 feet west of west mile-sign and immediately north of track, in southwest face of rock, 1 foot above track level, bolt set horizontally. No. 101-D. Elevation 4058 227.

\*Bolt has been removed.

**Patricia; C P Ry** Alberta Pacific Grain Company's elevator, in east concrete foundation wall, 9 feet 5 inches from northeast corner and 5 inches below metal sheathing, bolt set horizontally No. 343-D Elevation 2403 775.

Galvanized iron pipe culvert carrying irrigation ditch under railway, 3 miles east of station and at mileage 79.4 from Empress,  $\frac{1}{2}$  mile westerly from east boundary of sec. 16-20-12, in centre of north concrete face-wall, 8 inches below top, bolt set horizontally No. 344-D Elevation 2444 086.

**Pearce; C P Ry** Concrete bench-mark pier,  $\frac{3}{4}$  mile southwest of station and 270 feet west of mile post 26 from Lethbridge, 396 feet easterly from road allowance along east boundary of sec. 27-4-25 and 8 feet south of northerly limit of right of way, bolt set horizontally in northwest side of pier. No. 86-D. Elevation 3091-518.

**Pedley; C N Ry** Concrete bench-mark pier  $\frac{1}{2}$  mile southwest of station and 635 feet south of mile post 48 from Edson, 310 feet south of edge of a deep ravine and 38 feet west of easterly limit of right of way, bolt set horizontally in northwest side of pier No. 90-H Elevation 3467 151.

**Pears; C N Ry** See Carrot creek, B.M. No. 78-H, and Rosevear, B.M. No. 79-H.

**Pelgan; C P Ry** Large concrete box culvert, 1 mile northeast of station and at mileage 40.4 from Lethbridge, in north face of south wing-wall at east end of culvert, 22 inches east of east face-wall and 2 feet 8 inches below top of water passage bolt set horizontally No. 90-D. Elevation 3290 589.

Double concrete culvert, 100 feet west of westerly switch of passing-track and at mileage 41.7 from Lethbridge, in face of coping on north end of culvert, 8 inches below top, bolt set horizontally No. 91-D. Elevation 3319 941.

**Pemutan, C P Ry** Concrete bench-mark pier,  $1\frac{1}{2}$  miles south of station and 35 feet north of eleventh pole north of mile post 66 from Kerrobert, 18 feet south of a whistle post, 1,050 feet south of a private crossing and 3 feet west of easterly limit of right of way, bolt set vertically No. Z-40. Elevation 2256 336.

Concrete bench-mark pier,  $2\frac{1}{2}$  mile northwest of station and at mileage 70.4 from Kerrobert, 3 feet north of southerly limit of right of way and 21 feet easterly from road allowance along north boundary of sec. 11-35-4, this being the second crossing of this road northwest of station, bolt set vertically No. Z-39. Elevation 2185 812.

**Panhold; C P Ry** Concrete foundation of demolished section house, 560 feet north of station, 10 feet north of order board and underneath driveway of Alberta pool elevator, in west face of foundation, 2 feet 10 inches from southwest corner and 7 inches below top, bolt set horizontally No. H-26. Elevation 2954 156.

Plate girder bridge,  $4\frac{1}{2}$  miles north of station and at mileage 88.1 from Twelfth street east, Calgary, tablet in bridge east of north concrete abutment, 6 inches from west edge and 6 inches from south edge No. H-27. Elevation 2923 910.

**Philips; C N Ry** Demolished water tank, in southwest face of concrete foundation wall, 6 inches from northwest end and 3 inches below top; bolt set horizontally. No. 42-H. Elevation 2297 240.

**Philmont; N A Ry** Concrete bench-mark pier,  $1\frac{1}{2}$  miles northeast of section house and 7 feet north of second pole south of mile post 152 from Carbondale, 307 feet south of north mile sign, 1,420 feet south of a bridge and 47 feet west of track, bolt set vertically. No. V-42. Elevation 2031-801.



Concrete bench-mark pier,  $5\frac{1}{2}$  miles northeast of section house and 21 feet south of mile post 156 from Carbondale, on top of a ridge which crosses the track at an acute angle, 44 feet west of track, bolt set vertically No. V-43. Elevation 2128 945.

Concrete bench-mark pier 2 $\frac{1}{2}$  miles southwest of section house and 35 feet north of mile post 148 from Carbondale, at the south end of a long tangent and 45 feet east of track, bolt set vertically No. V-41 Elevation 2074 038.

Concrete bench-mark pier, 5 miles southwest of section house and 42 feet south of sixth pole south of mile post 148 from Carbondale, directly behind a small borrow pit and 48 feet west of track, tablet in top of pier. No. V-40. Elevation 1931-795

**Pibroch, N A Ry** Concrete bench-mark pier, 2 $\frac{1}{2}$  miles north of station and 87 feet north of first pole north of mile post 62 from junction with C N Ry, 16 feet south of a private crossing, about 1800 feet southerly from north boundary of sec. 19-61-26 and 3 feet west of easterly limit of right of way, bolt set vertically No. U-17 Elevation 2037 987

Concrete bench-mark pier  $1\frac{1}{2}$  miles south of station and 33 feet north of mile post 58 from junction of C N Ry, 42 feet north of a private crossing, 1,500 feet southerly from road allowance along north boundary of sec. 32-60-26 and 7 feet west of easterly limit of right of way, bolt set vertically; No. U-16 Elevation 2061 843.

**Pickardville; N A Ry** Concrete bench-mark pier, 2 $\frac{1}{2}$  miles north of station and 90 feet north of fourth pole north of milepost 46 from junction with C N Ry 100 feet north of a private crossing and 3 feet west of easterly limit of right of way, tablet in top of pier No. U-13 Elevation 2232 012.

**Pincher; C P Ry** Section house, 235 feet east of the station, in east stone foundation wall, 20 inches from northeast corner and 11 inches below wood-work, bolt set horizontally No. 94-D Elevation 3766 295.

**Pingle, N A Ry** Concrete bench-mark pier,  $1\frac{1}{2}$  miles north of north switch and 33 feet south of eighth pole north of mile post 220 from Carbondale, 400 feet southerly from north boundary of sec. 17-80-6 and 53 feet east of track, bolt set vertically No. V-60 Elevation 1756 499

Demolished water tank, 5 miles north of north switch and on south bank of Kettle river, in southerly concrete footing of the two which are parallel and nearest to track bolt set vertically near northwest corner. No. V-61 Elevation 1657 403

Concrete bench-mark pier, 6 $\frac{1}{2}$  miles north of north switch and 30 feet south of mile post 225 from Carbondale, 1,650 feet northerly from north boundary of sec. 5-81-6 and 57 feet west of track, bolt set vertically. No. V-62 Elevation 1672 420.

**Pitlochrie, N A Ry** Concrete bench-mark pier, 2 $\frac{1}{2}$  miles north of north switch and 6 feet north of tenth pole south of mile post 142 from Carbondale, 2,140 feet northerly from road allowance along north boundary of sec. 12-70-12 and 45 feet west of track, tablet in top of pier No. V-39. Elevation 1977-745.

Water tank,  $1\frac{1}{2}$  miles south of south switch, most southerly concrete footing under face which is parallel and nearest to track, in southwest face of footing, 6 inches below top, bolt set horizontally No. V-38. Elevation 1915 572.

\*When inspected in 1938, it was found that part of this footing had been broken away and the bolt had disappeared, the elevation is, however, recoverable approximately.

**Picloche—Concluded**

Concrete bench-mark pier,  $4\frac{1}{4}$  miles south of south switch and 50 feet south of twelfth pole south of mile post 135 from Carbondale, near the middle of a curve, 45 feet northwest of an old log shack and 33 feet east of track, tablet in top of pier No. V-37 Elevation 1915 355.

**Pos;** C N Ry See Holden, B.M. No. 46-H and Ryley, B.M. No. 47-H

**Ponoka;** C P Ry Canadian Bank of Commerce in east stone foundation wall, 9 inches from southeast corner and 3 feet 7 inches below brickwork, bolt set horizontally No. H-38. Elevation 2649 703.

Canadian Bank of Commerce, in east stone foundation wall, 15 inches south of entrance, 3 feet 9 inches below level of tops of window sills and 4 inches above sidewalk, bolt set horizontally No. H-38-A Elevation 2649 630.

Bank of Montreal, in east concrete foundation wall, 3 feet 6 inches south of entrance and 2 feet 7 inches below brickwork, bolt set horizontally. No. H-38-B Elevation 2649 220.

Concrete bench-mark pier,  $3\frac{1}{4}$  miles north of station and 30 feet north of fourth pole north of mile post 38 from Red Deer, 3 feet east of westerly limit of right of way, bolt set vertically No. H-38-C Elevation 2642 981

Plate girder bridge, 2 miles south of station and at mileage 32.8 from Red Deer, tablet in top of ballast wall on north concrete abutment, 4 inches from east end No. H-37 Elevation 2649 003.

**Princess;** C.P. Ry. See Patricia, B.M. No. 344-D and Denhart, B.M. No. 345-D

**Pulteney;** C P Ry Iron pipe in ground  $\frac{1}{4}$  mile north of station and 20 feet south of eighteenth pole south of mile post 76 from Twelfth street east, Calgary 380 feet north of north switch of passing-track and 2 feet east of westerly limit of right of way, brass cap on top of pipe No. C-C-12 Elevation 3426 820

**Purple Springs;** C P Ry Concrete bench-mark pier, 1 mile east of station and 87 feet east of mile post 64 from Dunmore, 330 feet easterly from road allowance along east boundary of sec. 14-10-14 and 4 feet north of southerly limit of right of way, bolt set horizontally in north side of pier, No. 184-C. Elevation 2619 039.

**Quilley;** N A Ry Concrete bench-mark pier, 3 miles northeast of north switch and 35 feet south of sixth pole south of mile post 236 from Carbondale, 2,000 feet north of a bridge over a creek about midway between north and south boundaries of sec. 34-82-6 and 47 feet east of track, bolt set vertically No. V-65. Elevation 1610 571.

Concrete bench-mark pier,  $4\frac{1}{4}$  miles south of south switch and 6 feet north of third pole north of mile post 228 from Carbondale, 1,520 feet northerly from road allowance along north boundary of sec. 19-81-6 and 47 feet east of track, bolt set vertically No. V-63 Elevation 1657 941

Concrete bench-mark pier  $\frac{1}{2}$  mile south of south switch and 40 feet south of sixth pole south of mile post 232 from Carbondale, 635 feet southerly from road allowance along north boundary of sec. 9-82-6 and 48 feet east of track, bolt set vertically No. V-64 Elevation 1690 869

**Radnor;** C P Ry Concrete bench-mark pier,  $\frac{1}{2}$  mile east of station and 1,315 feet west of mile post 32 from Calgary, 7 feet south of northerly limit of right of way, bolt set horizontally in north side of pier No. 225-C. Elevation 3858 033.

**Radway, C N Ry** Concrete bench-mark pier 3 miles northeast of station and 59 feet east of mile post 46 from St. Paul Junction, 12 feet west of a private crossing, 1,006 feet westerly from road allowance along east boundary of sec 2-39-20 and 4 feet south of northerly limit of right of way, bolt set vertically No. DD-4. Elevation 2086 695.

Concrete bench-mark pier 1 mile southwest of station and 45 feet west of second pole east of mile post 42 from St. Paul Junction, 1,716 feet easterly from road allowance along east boundary of sec 25-38-21 and 3 feet south of northerly limit of right of way, bolt set vertically No. DD-3. Elevation 2080 163.

**Ranfurly, C N Ry** Iron pipe filled with concrete, 4½ miles east of station and 85 feet west of mile post 35 from Vermilion, 60 feet east of the east end of a tangent, about 40 feet west of east end of a shallow cut and 3 feet south of northerly limit of right of way, bolt set vertically No. L-26. Elevation 2191 421.

Iron pipe filled with concrete, 1,483 feet northwest of west switch of passing track, 185 feet east of a road crossing and 3 feet north of southerly limit of right of way, bolt set vertically No. L-25. Elevation 2163 076.

**Redcliff, C P Ry** Station, in southwest concrete foundation wall, 3 feet northwest of porch at rear entrance and 7 inches below woodwork, bolt set horizontally. No. 331-D. Elevation 2442 928.

Municipal water tank, in most northerly concrete footing, 6 inches from north edge, bolt set vertically No. 332-D. Elevation 2492 448.

Concrete bench-mark pier 2½ miles southeast of station and at mileages 3-2 from Medicine Hat, 12 feet westerly from road allowance along east boundary of sec 3-13-6 and 4 feet south of northerly limit of right of way, bolt set vertically No. 333-D. Elevation 2340 932.

**Red Deer, C P Ry** Fundamental bench mark in front of city hall, 20 feet south of southerly curb of Ross street and 228 feet west of westerly curb of Second avenue northeast, tablet in top of pier No. 809-C. Elevation 2817 452.

Post office at southwest corner of Ross street and First avenue northeast, west stone foundation wall, third course below brickwork, bolt set horizontally in first stone from northwest corner No. H-28. Elevation 2819 317.

Bridge over Red Deer river, ¼ mile north of station, tablet in top of most southerly concrete pier 10 inches from pointed downstream end. No. H-29. Elevation 2805 099.

**Redland, C N Ry** Concrete bench-mark pier, 2½ miles southwest of station and at eighteenth pole west of mile post 81 from Hanna, 45 feet west of a trestle over Serviceberry creek, 330 feet east of a private crossing and 2 feet north of southerly limit of right of way, bolt set vertically No. B-142. Elevation 2670 817.

**Ribstone, C N Ry** Concrete bench-mark pier, 1½ miles west of station and 27 feet west of eighth pole west of mile post 113 from Hagar, 2,940 feet west of bridge over Ribstone creek and 7 feet south of northerly limit of right of way, bolt set horizontally in north side of pier No. 31-H. Elevation 2042 217.

**Richdale, C N Ry** Concrete bench-mark pier, 2 miles northwest of station and 13 feet east of tenth pole east of mile post 123 from Kindersley, 132 feet west of a private crossing, 2,440 feet westerly from road allowance along east boundary of sec 4-31-12 and 2 feet south of northerly limit of right of way, tablet in top of pier No. B-106. Elevation 2548 504.

**River Bend;** C.N.Ry. See Oliver, B.M. No. L-2.

**Robertson;** C.P.Ry. Bridge over westerly channel of Bow river, 1 mile southeast of station and at mileage 7.8 from Calgary, in west or rear face of west stone abutment, directly in line with southerly truss and first course below bridge seat, bolt set horizontally. No. 219-C. Elevation 3515.125.

**Rockyford;** C.N.Ry. Concrete box culvert, 10 feet northeast of northeast Y switch,  $\frac{1}{2}$  mile northeast of station and at mileage 86.7 from Hanna, bolt set vertically in top of coping on south end of culvert, 7 inches from west end of same. No. S-145. Elevation 2766.084.

Concrete bench-mark pier,  $1\frac{1}{2}$  miles northeast of station and 16 feet east of tenth pole east of mile post 86 from Hanna, 545 feet easterly from road allowance along east boundary of sec. 27-26-23 and 2 feet south of northerly limit of right of way, tablet in top of pier. No. S-143. Elevation 2746-970.

Concrete box culvert, 1 mile southwest of station and at mile post 88 from Hanna, bolt set vertically in top of coping on north end of culvert, 7 inches from east end of same. No. S-146. Elevation 2775.385.

Concrete bench-mark pier  $2\frac{1}{2}$  miles southwest of station and 17 feet east of fourteenth pole west of mile post 89 from Hanna, 132 feet westerly from road allowance along north boundary of sec. 8-26-23 and 2 feet south of northerly limit of right of way, tablet in top of pier. No. S-147. Elevation 2785.887.

**Rosebud;** C.N.Ry. Rosebud hotel, directly northwest of station, in concrete foundation of southwest side wall, 1 foot from southerly corner and 2 feet 1 inch below woodwork, bolt set horizontally. No. S-140. Elevation 2590.617.

Concrete bench-mark pier,  $1\frac{1}{2}$  miles northeast of station and 2 feet south of northerly limit of right of way, bolt set vertically. No. S-139. Elevation 2561.315.

Concrete bench-mark pier,  $1\frac{1}{2}$  miles west of station and 29 feet west of seventeenth pole east of mile post 78 from Hanna, 200 feet east of the centre of a cut, 76 feet west of a private crossing and 2 feet south of northerly limit of right of way; bolt set vertically. No. S-141. Elevation 2605.308.

**Rosedale;** C.N.Ry. Concrete bench-mark pier, 2 miles southwest of station and 30 feet east of tenth pole east of mile post 59 from Hanna, 735 feet east of plate girder bridge over Rosebud river and 2 feet south of northerly limit of right of way; tablet in top of pier. No. S-135. Elevation 2260.725.

Concrete bench-mark pier, 2 miles northwest of station and 20 feet north of fourth pole north of mile post 55 from Hanna, 244 feet south of a concrete arch culvert and 2 feet east of westerly limit of right of way; tablet in top of pier. No. S-124. Elevation 2247.686.

**Rosemary;** C.P.Ry. Water tank, in concrete foundation wall 13 inches below woodwork and directly beneath the spout; bolt set horizontally. No. 348-D. Elevation 2443-224.

$\frac{3}{4}$  Concrete bench-mark pier, 4 miles west of station and at mile post 105 from Empress, 30 feet westerly from road allowance along east boundary of sec. 8-21-16 and 5 feet north of southerly limit of right of way; bolt set vertically. No. 337-D. Elevation 2448.647.

**Rosevear;** C.N.Ry Concrete bench-mark pier,  $2\frac{1}{2}$  miles east of station and 74 feet east of eleventh pole east of mile post 114 from Edmonton, opposite the centre of a cut at north side of track, 1,465 feet easterly from road allowance along east boundary of sec 14-54-15 and 64 feet south of track; bolt set horizontally in north side of pier. No. 79-H Elevation 2841 572.

**Royal Park;** C N.Ry. Iron pipe filled with concrete, 1,650 feet southeast of station, 630 feet east of east switch of passing-track and 4 feet south of northerly limit of right of way, bolt set vertically No. L-19 Elevation 2167-732.

Iron pipe filled with concrete,  $3\frac{1}{2}$  miles southeast of station and 15 feet east of fourteenth pole west of mile post 60 from Vermilion or eighth pole west of road allowance along east boundary of sec 27-52-15, 4 feet south of northerly limit of right of way, bolt set vertically No. L-20 Elevation 2116 613.

**Ryley;** C N Ry N. Rucker's flour mill, in northwest face of concrete stairway at main entrance, 6 inches below tread of top step and 15 inches south-westerly from front wall of building, bolt set horizontally. No. 47-H. Elevation 2268 680.

Disused concrete pier at south side of track, formerly used to support lever for interlocking plant, 1 mile northwest of station and 15 feet east of Haight Junction switch, bolt set horizontally in southwest face of pier, 4 inches below top. No. 48-H Elevation 2272 401.

**St. Albert;** C.N.Ry See Campbell, B M. No. U-2

**St. Paul;** C N Ry Section house, in east concrete foundation wall, 11 inches from southeast corner and 5 inches below woodwork, bolt set horizontally. No. DD-27 Elevation 2120 199.

Concrete bench-mark pier,  $\frac{1}{2}$  mile east of station, 142 feet west of a whistle post, 840 feet east of first road crossing east of station and 4 feet north of southerly limit of right of way, bolt set vertically No. DD-28. Elevation 2104 859

Concrete bench-mark pier,  $\frac{1}{2}$  mile west of station and 41 feet west of fourteenth pole east of mile post 119 from St. Paul Junction, 520 feet easterly from road allowance along east boundary of sec 7-58-9 and 4 feet south of northerly limit of right of way, bolt set vertically No. DD-26. Elevation 2136 273.

**Sandstone;** C P.Ry Concrete box culvert, 460 feet south of station and between ninth and tenth poles south of mile post 22 from Twelfth street east, Calgary, in north end of west face, 7 inches below top, bolt set horizontally No. 58-D. Elevation 3521 561.

**Saulteux;** N A.Ry. Concrete bench-mark pier,  $1\frac{1}{2}$  miles northwest of station and 6 feet east of seventh pole west of mile post 145 from junction with C.N.Ry, 1,300 feet easterly from road allowance along east boundary of sec 22-72-3 and 42 feet north of track, bolt set vertically. No. U-41. Elevation 1943 757

**Sawback;** C P Ry Concrete bench-mark pier, 1 mile northwest of station and 110 feet west of mile post 89 from Calgary, opposite a point where the railway touches an inlet from the Bow river and 95 feet north of track; bolt set horizontally in northeast side of pier. No. 242-C Elevation 4563-640.

**Scotfield; C N Ry** Concrete bench-mark pier,  $1\frac{1}{2}$  miles southeast of station and 16 feet east of ninth pole east of mile post 107 from Kindersley, 347 feet west of a whistle post for eastbound trains, 1,625 feet westerly from road allowance along east boundary of sec 11-30-10 and 2 feet south of northerly limit of right of way, tablet in top of pier No. 8-100 Elevation 2495 043.

Concrete bench-mark pier,  $2\frac{1}{2}$  miles northwest of station and 15 feet east of seventeenth pole west of mile post 110 from Kindersley, 480 feet west of a whistle post for westbound trains, 800 feet easterly from road allowance along east boundary of sec 18-30-10 and 1 foot south of northerly limit of right of way, tablet in top of pier No. 8-101 Elevation 2506 501.

**Scotford, C N Ry** Iron pipe filled with concrete,  $\frac{1}{2}$  mile northeast of station and 12 feet west of third pole east of mile post 106 from Vermilion, 95 feet east of east switch of passing-track, 600 feet westerly from road allowance along east boundary of sec 20-55-21 and 3 feet south of northerly limit of right of way, bolt set vertically No. L-7 Elevation 2064 171.

Iron pipe filled with concrete 3 miles northeast of station and 55 feet west of third pole west of mile post 103 from Vermilion, 960 feet east of a private crossing and 3 feet south of northerly limit of right of way, bolt set vertically. No. L-8. Elevation 2069 413.

**Seba Bench; C N Ry** See Falls, B M No 70-H.

**Seebe; C P Ry** Bridge over Kananaskis river  $\frac{1}{2}$  mile east of station and at mileage 51.9 from Calgary, in south face of west concrete abutment, 20 inches below bridge seat, bolt set horizontally No. 229-C Elevation 4212 616.

Large flat boulder,  $2\frac{1}{2}$  miles northeast of station and at third pole east of mile post 50 from Calgary, 30 feet north of track, bolt set horizontally in east face of boulder No. 228-C Elevation 4222 367.

Steel truss bridge over Bow river, 1 mile west of station, in north face of west concrete abutment, 20 inches below bridge seat, bolt set horizontally No. 230-C. Elevation 4207 519.

**Sentinel, C P Ry** Plate girder bridge at east end of passing-track and at mileage 95.6 from Lethbridge, in north face of east concrete abutment, 18 inches below bridge seat, bolt set horizontally No. 107-D Elevation 4439 927.

Large concrete arch culvert,  $2\frac{1}{2}$  miles east of Crowneast, B.C. and at mileage 96.3 from Lethbridge, in east face of south face-wall, 16 inches below top, bolt set horizontally No. 108-D Elevation 4428 293.

Interprovincial boundary monument between Alberta and British Columbia, at "The Great Divide, 530 feet southeast of Crowneast station and 50 feet northeast of main track, bolt set horizontally in southwest face of concrete base No. 109-D Elevation 4456 999.

Small concrete box culvert, the more easterly of two, 2 miles northwest of Crowneast, B.C., in south face of culvert, 3 feet 3 inches from west end and 11 inches below top, bolt set horizontally No. 110-D Elevation 4405 867.

Stone retaining wall at north side of track, 4 miles northwest of Crowneast, B.C., in west face of concrete coping, 10 inches below top, bolt set horizontally No. 111-D. Elevation 4308 226.

**Sevenpersons; C P Ry** Plate girder bridge over Sevenpersons creek, 3 miles east of station, in south face of west concrete abutment, 1 foot below top; bolt set horizontally. No. 173-C Elevation 2460 322.

Double concrete culvert  $3\frac{1}{2}$  miles east of station and at mile post 14 from Dunmore, at sixteenth pole west of road allowance along east boundary of sec 12-11-7 in east face of west wing-wall at south end of culvert bolt set horizontally No 172-4 Elevation 2449 965

Large concrete arch culvert  $2\frac{1}{2}$  miles southwest of station and at mileage 19 8 from Dunmore in west face of coping on south end of culvert, bolt set horizontally No 174-4 Elevation 2518 203

**Sharrow, C P Ry** Concrete bench-mark pier  $1\frac{1}{2}$  miles northeast of station and at mile post 7 from Empress, at the east end of a deep cut, 760 feet easterly from road allowance along east boundary of sec 1-23-2 and 4 feet south of northerly limit of right of way, bolt set vertically No 363-D Elevation 2010 683

**Shoats, C N Ry** Water tank, 1 mile southeast of station, in southwest face of concrete foundation wall, 3 feet 4 inches to the right of the spout and 4 inches below woodwork bolt set horizontally No 49-H Elevation 2232 065

**Sibbald, C N Ry** Pioneer Grain Company's elevator, directly opposite the station in east concrete foundation wall, 13 inches from northeast corner and 14 inches below woodwork bolt set horizontally No 8-80 Elevation 2357 225

Concrete bench-mark pier,  $1\frac{1}{2}$  miles southeast of station and at mileage 49 6 from Kindersley, 363 feet westerly from road allowance along east boundary of sec 7 28-1 and 2 feet south of northerly limit of right of way, tablet on top of pier No 8-79 Elevation 2347 221

Royal hotel at Almah Nask, on west side of main street, directly north of station in south concrete foundation wall, 16 inches from south-east corner and 10 inches below woodwork, bolt set horizontally No. 8-77, Elevation 2304 942.

Royal Nask at Almah Nask in east concrete foundation wall, 10 inches from southeast corner and 2 feet 2 inches below brickwork, bolt set horizontally. No. 8-76. Elevation 2312 178.

Public school (school district No 2761 at Almah Nask, in south concrete foundation wall, 9 inches from southwest corner and 4 feet 6 inches below brickwork bolt set horizontally No 8-75 Elevation 2323 779.

Concrete bench-mark pier,  $2\frac{1}{2}$  miles north of Almah, Nask on road allowance along east boundary of sec 22-28-29, 4 feet east of west limit of road allowance and 35 feet south of northeast corner of sec 22, bolt set vertically No. 631-C. Elevation 2275 196.

Concrete bench-mark pier,  $6\frac{1}{2}$  miles north of Almah, Nask, on road allowance along east boundary of sec 36-29-1, 3 feet east of west limit of road allowance and 25 feet north of east quarter corner of sec 36, bolt set vertically. No. 633-C. Elevation 2310 084

Concrete bench-mark pier  $3\frac{1}{2}$  miles south of Almah, Nask, on road allowance along east boundary of sec 27-27-29, 4 feet east of west limit of road allowance and 20 feet north of southeast corner of sec 27, bolt set vertically No 630-C Elevation 2296 221

Concrete bench-mark pier 9 miles south of Almah, Nask, on road allowance along east boundary of sec 26-26-29, 4 feet east of west limit of road allowance and 1 120 feet north of southeast corner of sec 26, bolt set vertically No 629-C Elevation 2385 245

Concrete bench-mark pier  $1\frac{1}{2}$  miles south of Almah, Nask, on road allowance along east boundary of sec 9-26-29, 4 feet east of west limit of road allowance and 20 feet south of northeast corner of sec 9, bolt set vertically No. 628-C Elevation 2475 233.

**Sibbald—Concluded**

Concrete bench-mark pier, 15½ miles south of Almask, Sask., on road allowance along east boundary of sec 21-25-29, 3 feet east of west limit of road allowance and 12 feet south of northeast corner of sec 21, bolt set vertically No. 627-C. Elevation 2531 218.

**Slave Lake; N A Ry** Concrete bench-mark pier ¼ mile east of station and 75 feet east of second pole west of mile post 162 from junction with C N Ry, 350 feet east of a private crossing, ¼ mile easterly from east boundary of sec 36-72-6 and 3 feet north of southerly limit of right of way, bolt set vertically No. U-45. Elevation 1913 097

Concrete bench-mark pier 2 miles west of station and 10 feet west of nineteenth pole west of mile post 154 from junction with C N Ry, 150 feet westerly from road allowance along east boundary of sec 3-73-6 and 3 feet south of northerly limit of right of way, bolt set vertically No. U-46. Elevation 1901 143

**Smith; N A Ry** Concrete bench-mark pier, 3 miles south of station, 100 feet south of second pole north of mile post 128 from junction with C N Ry and 45 feet east of track, bolt set vertically No. U-34. Elevation 1929 088.

Steel trestle bridge over Athabasca river ¼ mile west of station, in top of ballast wall on east concrete abutment, 16 inches from south or upstream edge and 16 inches from west edge of wall bolt set vertically No. U-35. Elevation 1855 030.

In same bridge as bench mark No. U-35, in top of ballast wall on west concrete abutment, 13 inches from south or upstream edge and 14 inches from east edge of wall, bolt set vertically No. U-36. Elevation 1845 006.

In same bridge as bench mark No. U-35, in south face of most easterly concrete pier 1 foot above bottom of battered portion and 3 feet 6 inches from east face of pier bolt set horizontally No. U-37. Elevation 1835 007.

Concrete bench-mark pier 1½ miles northwest of station, 5 feet south of ninth pole north of mile post 132 from junction with C N Ry and 35 feet west of track, bolt set vertically No. U-38. Elevation 1873 007

**Smoky Lake, C N Ry** Concrete bench-mark pier 1½ miles northeast of station and 3 feet south of third pole south of mile post 66 from St. Paul Junction, 2,310 feet northerly from road allowance along north boundary of sec 22-59-17 and 3 feet east of westerly limit of right of way, bolt set vertically No. DD-9. Elevation 1999 430

Concrete bench-mark pier 2½ miles southwest of station and 30 feet east of mile post 82 from St. Paul Junction, 1,255 feet easterly from road allowance along east boundary of sec 8-59-17 and 3 feet south of northerly limit of right of way, bolt set vertically No. DD-8. Elevation 2133 913.

**Snaring, C N Ry** See Henry House, B.M. No. 101-H

**Solomon; C N Ry** See Entrance, B.M. No. 94-H and 95-H

**Southask; C P Ry** Concrete box culvert 50 feet north of north switch and at second pole south of mile post 81 from Medicine Hat, in centre of south-west face, bolt set horizontally No. 312-D. Elevation 2505 736

**Spodden; C N Ry** Concrete bench-mark pier, 2½ miles east of station and 35 feet east of first pole east of mile post 101 from St. Paul Junction, 695 feet westerly from road allowance along east boundary of sec 36-59-12 and 4 feet north of southerly limit of right of way, bolt set vertically No. DD-20. Elevation 2089 648.



Concrete bench-mark pier  $1\frac{1}{2}$  miles west of station and 35 feet west of first pole east of mile post 97 from 34 Paul Junction 365 feet westerly from road allowance along east boundary of sec 23-29-13 and 3 feet south of northerly limit of right of way bolt set vertically No 11D-19 Elevation 2135 491

**Spencegrove, C N Ry** Public school at southwest corner of sec 3-23-27, in south or front concrete foundation wall, 8 inches from southwest corner and 1 foot below woodwork bolt set horizontally No 64-H Elevation 2325 056

**Spurfield, N A Ry** See Maultous B M No U-41

**Standard, C P Ry** Public school tablet in north or front concrete foundation wall 14 inches from northwest corner and 3 feet 6 inches below brickwork No 297-D-2. Elevation 2054 936

Concrete bench-mark pier  $3\frac{1}{2}$  miles east of station and at mileage 22  $\frac{1}{2}$  from Bassano 27 feet westerly from road allowance along east boundary of sec 6-25-21 and 4 feet south of northerly limit of right of way, bolt set vertically No 298-11 Elevation 2072 803

Concrete bench-mark pier  $4\frac{1}{2}$  miles west of station and at mileage 29  $\frac{1}{2}$  from Bassano 72 feet westerly from road allowance along east boundary of sec 12-25-23 and 14 feet south of northerly limit of right of way, bolt set vertically No 298-D. Elevation 2021 453.

**Stannover, C N Ry** Public school in north concrete foundation wall, 10 inches from northwest corner and 1 foot below woodwork bolt set horizontally No. 8-103. Elevation 2581 274.

Concrete bench-mark pier  $1\frac{1}{2}$  miles east of station and 20 feet west of eleventh pole east of mile post 115 from Kindersley, 1,240 feet westerly from road allowance along east boundary of sec 21-30-11 and 2 feet south of northerly limit of right of way tablet in top of pier No 8-102 Elevation 2565 852

Concrete bench-mark pier  $2\frac{1}{2}$  miles northwest of station and 26 feet west of tenth pole east of mile post 119 from Kindersley about midway between two sloughs which are about 600 feet apart 2,800 feet westerly from road allowance along east boundary of sec 25-30-12 and 2 feet south of northerly limit of right of way tablet in top of pier No 8-104 Elevation 2525 907

**Stevaley, C P Ry** Canadian Bank of Commerce in west concrete foundation wall 3 feet 8 inches from northwest corner and 15 inches below brickwork, bolt set horizontally No 13-10 Elevation 3420 217

Residence of C. Carson on northwest  $\frac{1}{2}$  sec 23-13-27 2 miles south of station and 400 feet east of railway in north concrete foundation wall, 1 foot from northeast corner and 18 inches below woodwork, bolt set horizontally No C-11 Elevation 3392 620

**Stettin, C P Ry** Municipal water tank in southeasterly concrete footing, 4 inches from southwest edge and 5 inches from southeast edge, bolt set vertically. No. Z-12. Elevation 2008-207.

Concrete bench-mark pier  $4\frac{1}{2}$  miles east of station and 17 feet east of fifth pole east of mile post 53 from Coronation or thirteenth pole west of road allowance along east boundary of sec 25-28-19 3 feet north of northerly limit of right of way bolt set vertically No Z-13 Elevation 2055 236

Concrete bench-mark pier 3 miles west of station and at second pole west of mile post 60 from Coronation, at fourteenth pole east of road allowance along east boundary of sec 3-30-20 and 3 feet south of northerly limit of right of way, tablet in top of pier No. Z-11 Elevation 2060 374.

**Stirling; C.P. Ry.** Station, in southwest or rear concrete foundation wall, 4 feet 4 inches from southerly corner and 1 foot below woodwork, bolt set horizontally No. 203-C Elevation 3040 536.

Presbyterian church, a small frame building about  $\frac{1}{2}$  mile west of the station, in concrete foundation of east side wall 12 feet from southeast corner and 8 inches below woodwork, bolt set horizontally No. 204-C. Elevation 3040 985.

Red granite boulder, 5 miles northwest of station and 35 feet north of fourteenth pole south of mile post 90 from Manyberries, 10 feet east of westerly limit of right of way, bolt set horizontally in northwest face of boulder No. 202-C Elevation 3072 078.

**Stonyplain; C.N. Ry.** Armbruster Lumber Company's planing mill, on south  $\frac{1}{2}$  side of railway, 400 feet west of the station, in north concrete foundation wall, 29 feet from northwest corner and 6 inches below woodwork, bolt set horizontally No. 65-H Elevation 2327 434.

**Stowe; C.P. Ry.** Section house, at northeast end of passing track, in northwest or front concrete foundation wall, 10 feet 6 inches from westerly corner and 5 inches below woodwork, bolt set horizontally No. 89-D. Elevation 3225 137.

**Strathcona; C.P. Ry.** See Edmonton.

**Styal, C.N. Ry.** See Lobatuk, B.M. No. 73-H.

**Suffield; C.P. Ry.** Station, in northeast concrete foundation wall, 11 feet southeast of rear entrance and 11 inches below woodwork, bolt set horizontally No. 326-D Elevation 2463 462.

Suffield Trading Company's store, a red brick building on east side of the main street about 300 yards north of railway, in concrete foundation of south side wall, 10 feet from southwest corner and 3 inches below brickwork, bolt set horizontally No. 327-D Elevation 2459 541.

**Swatwell; C.N. Ry.** United Grain Growers elevator No. 48, in west concrete foundation wall, 8 feet from southwest corner and 19 inches below metal sheathing, bolt set horizontally No. 51-F Elevation 2952 978.

**Swatika; C.P. Ry.** Concrete bench-mark pier,  $\frac{3}{4}$  miles southeast of station and at mileage 58.7 from Bassano, 330 feet northerly from road allowance along north boundary of sec. 12-26-25 and 5 feet west of easterly limit of right of way bolt set vertically No. 292-D Elevation 3050 703.

Concrete bench-mark pier, 2 miles northwest of station and at mileage 64.3 from Bassano, 57 feet easterly from road allowance along east boundary of sec. 31-26-25 and 3 feet north of southerly limit of right of way, bolt set vertically No. 291-D. Elevation 3059 592.

**Sweetgrass, Montana; See Cousta.**

**Taber; C.P. Ry.** Public school, in concrete foundation of west side wall, 4 feet 8 inches from southwest corner and 9 inches below brickwork, bolt set horizontally No. 187-C Elevation 2658 540.

Canadian Bank of Commerce, in concrete foundation of west side wall, 4 feet from southwest corner and 18 inches below brickwork; bolt set horizontally No. 186-C Elevation 2668 081.

[This bench mark has been rendered inaccessible by a covered driveway constructed along north side of building and hence the elevation is recoverable only approximately.]

Concrete bench-mark pier  $4\frac{1}{2}$  miles east of station and 100 feet east of mile post 72 from Danmore,  $\frac{1}{2}$  mile westerly from east boundary of sec. 13-10-16 and 5 feet north of southerly limit of right of way, bolt set horizontally in north side of pier No. 185-C. Elevation 2641 315.

Concrete box culvert 2 miles west of station and at mileage 78.5 from Danmore, 1950 feet easterly from road allowance along east boundary of sec. 35-9-17 in west end of south face, 16 inches below top, bolt set horizontally. No. 188-C. Elevation 2677 443.

**Toss,** (P Ry) Alberta-Pacific Grain Company's elevator, in east concrete foundation wall, 30 feet from southeast corner and 9 inches below metal sheathing bolt set horizontally. No. Z-5. Elevation 2710 443.

**Temple,** (P Ry) Plate girder bridge over Baker creek,  $2\frac{1}{2}$  miles southeast of station and at mileage 108.4 from Calgary, in north end of northwest face of east concrete abutment, 2 feet 2 inches above bridge seat, bolt set horizontally. No. 246-C. Elevation 4874 428.

**Thorhild,** (N A Ry) Foundation built for water tank, 2 miles southwest of station and at mileage 36.8 from Carbondale, in centre of northwest face of southwesterly concrete footing 6 inches below top, bolt set horizontally. No. V-10. Elevation 2120 121.

Concrete bench-mark pier 1 mile northeast of station and 30 feet north of second pole south of mile post 40 from Carbondale, 110 feet south of north mile-sign and 3 feet west of easterly limit of right of way, bolt set vertically. No. V-11. Elevation 2136-293.

**Three Hills,** (C N Ry) Concrete bench-mark pier  $3\frac{1}{2}$  miles north of station and 12 feet north of third pole north of mile post 57 from Mirror, about 170 feet north of south end of a short tangent and 5 feet east of westerly limit of right of way, bolt set horizontally in north side of pier No. 54-V. Elevation 2982 731.

**Throne,** (P Ry) Concrete bench-mark pier, 1 mile southeast of station and at mileage 107.8 from Kerrobert, 80 feet westerly from road allowance along east boundary of sec. 30-35-9 and 3 feet north of southerly limit of right of way, bolt set vertically. No. Z-30. Elevation 2593 858.

Concrete bench-mark pier  $3\frac{1}{2}$  miles northwest of station and at mileage 112.3 from Kerrobert, 17 feet westerly from road allowance along east boundary of sec. 4-35-10 and 3 feet south of northerly limit of right of way, bolt set vertically. No. Z-29. Elevation 2558 629.

**Tinland,** (N A Ry) Concrete bench-mark pier, 2 miles north of station and 30 feet north of seventeenth pole north of mile post 103 from junction with C N Ry, 42 feet west of track, bolt set vertically. No. U-38. Elevation 2009 272.

Concrete bench-mark pier, 1 mile south of station and 86 feet north of twelfth pole north of mile post 100 from junction with C N Ry, 42 feet east of track, bolt set vertically. No. U-27. Elevation 2018 537.

**Tilley,** (C P Ry) Concrete box culvert carrying irrigation ditch under railway,  $1\frac{1}{2}$  miles northwest of station and at mileage 54.6 from Medicine Hat, in centre of southwest face, bolt set horizontally. No. 319-D. Elevation 2458 394.

Concrete box culvert, immediately northwest of another culvert carrying an irrigation ditch under railway,  $1\frac{1}{2}$  miles southeast of station and at mileage 51.9 from Medicine Hat, in centre of northeast face, 12 inches below top, bolt set horizontally. No. 320-D. Elevation 2455 659.

\*Subsequent inspection of this bench mark indicates that the elevation may not be precise.

**Tofield; C N Ry** Fundamental bench mark, about  $\frac{1}{2}$  mile northwest of station, 57 feet south and 4 feet east of northeast corner of sec 2-51-10; tablet in top of pier No. 51-H-2 Elevation 2277 999

Town hall and fire station, in south concrete foundation wall, 1 foot from southeast corner and 1 foot below metal sheathing, bolt set horizontally. No. 51-H. Elevation 2300 004

Station, in north or rear concrete foundation wall, 30 feet from northeast corner and 7 inches below woodwork, bolt set horizontally No. 50-H. Elevation 2293 958

Concrete bench-mark pier, 4 miles northwest of station and 12 feet east of first pole east of mile post 90 from Wainwright, 13 feet easterly from road allowance along east boundary of sec 8-51-19 and 4 feet south of northerly limit of right of way, tablet in top of pier No. 51-H-3. Elevation 2364-281

Water tank,  $2\frac{1}{2}$  miles south of station, in northerly concrete footing of the two which are parallel and nearest to track, tablet in west face of footing, 2 inches below top. No. 75-F-3. Elevation 2352 891

**Torlea; C N Ry** Concrete bench-mark pier,  $\frac{1}{2}$  mile southeast of station and 21 feet west of fifth pole west of mile post 50 from Wainwright, 115 feet east of a whistle post for station, 1,090 feet easterly from road allowance along east boundary of sec 12-48-14 and 5 feet south of northerly limit of right of way, bolt set horizontally in northeast side of pier No. 44-H. Elevation 2251 935

**Trochu; C N Ry** Roman Catholic school,  $\frac{1}{2}$  mile southeast of station, in west concrete foundation wall of entrance section, 1 foot from southwest corner and 2 feet below brickwork, bolt set horizontally No. 55-F. Elevation 2863 039

**Tudor; C P Ry** School house, Glenrose 8 D No. 3154, tablet in north concrete foundation wall, 8 feet 5 inches from northwest corner and 2 feet below woodwork No. 295-D-2 Elevation 2938 760

Alberta-Pacific Grain Company's elevator, in southeast concrete foundation wall, 12 feet from corner nearest the railway and 9 inches below metal sheathing, bolt set horizontally No. 295-D Elevation 2885 862

Concrete bench-mark pier 3 miles west of station and at mileage 48-4 from Bassano, 65 feet easterly from road allowance along east boundary of sec. 25-25-24 and 4 feet south of northerly limit of right of way, bolt set vertically. No. 294-D Elevation 2886 331.

**Turner; C N Ry** See Midnapore, B.M. No. 53-D.

**Tweedie; N A Ry** Concrete bench-mark pier,  $1\frac{1}{2}$  miles northeast of station and 12 feet west of fourth pole west of mile post 131 from Carbondale, near the northeast end of a short tangent between two curves 400 feet easterly from road allowance along east boundary of sec 21-68-12 and 46 feet south of track, tablet in top of pier No. V-36 Elevation 1957 828

Concrete bench-mark pier  $2\frac{1}{2}$  miles southwest of station and 80 feet south of third pole south of mile post 127 from Carbondale, exactly opposite the north end of a curve, opposite a small lake and 40 feet east of track, tablet in top of pier No. V-35. Elevation 1945 068

**Twining; C N Ry** Water tank, 1 mile northeast of station, in southwesterly concrete footing of the two which are parallel and nearest to track, bolt set horizontally in west face of footing, 7 inches below top. No. 52-F Elevation 2787-061.

**Uncas; C N Ry** Concrete bench-mark pier,  $1\frac{1}{2}$  miles northwest of station and 30 feet east of third pole west of mile post 106 from Wainwright, 70 feet east of a private crossing, 700 feet westerly from road allowance along east boundary of sec 20-32-21 and 9 feet south of northerly limit of right of way, bolt set horizontally in northeast side of pier No. 54-H. Elevation 2426-143

**Union Junction; C N Ry** Concrete bench-mark pier,  $1\frac{1}{2}$  miles east of station and at twelfth pole east of mile post 5 from North Edmonton, 700 feet east of E.D. and B.C. Ry junction, 135 feet west of west line of 135th street and 3 feet north of southerly limit of right of way, tablet in top of pier No. U-1. Elevation 2219-048.

**Vegreville; C N Ry** Iron pipe filled with concrete,  $\frac{1}{2}$  mile southeast of station and 45 feet east of seventeenth pole west of mile post 56 from Vermilion, 530 feet east of a trestle and 4 feet north of southerly limit of right of way, bolt set vertically No. L-21. Elevation 2062 116

Iron pipe filled with concrete,  $\frac{1}{2}$  mile east of station and 22 feet west of fourth pole west of mile post 52 from Vermilion, 38 feet east of a private crossing and 4 feet south of northerly limit of right of way, bolt set vertically. No. L-22. Elevation 2183 471

**Veldt; C P Ry** Concrete bench-mark pier,  $\frac{1}{2}$  mile southeast of station and 45 feet east of third pole west of mile post 25 from Coronation, 12 feet west of a private crossing and 3 feet south of northerly limit of right of way, bolt set vertically. No. Z-21. Elevation 2711-328.

Concrete bench-mark pier,  $\frac{1}{2}$  mile northwest of station and 66 feet east of fourteenth pole east of mile post 30 from Coronation,  $\frac{1}{2}$  mile easterly from east boundary of sec 21-38-15 and 3 feet north of southerly limit of right of way, bolt set vertically No. Z-20. Elevation 2723 072.

**Venice; N A Ry** Concrete bench-mark pier,  $\frac{1}{2}$  mile southeast of station and 57 feet west of first pole east of mile post 106 from Carbondale, 5 feet north of southerly limit of right of way, tablet in top of pier No. V-29. Elevation 1890-116

Concrete bench-mark pier,  $1\frac{1}{2}$  miles southwest of station and 57 feet south of eleventh pole south of mile post 103 from Carbondale, 250 feet south of a private crossing and 7 feet west of easterly limit of right of way, tablet in top of pier No. V-28. Elevation 1886 101

**Vermilion; C N Ry** Fundamental bench mark in town park, 86 feet south of south line of First street and 284 feet west of west line of Bulfinch avenue, tablet in top of pier No. 826-C. Elevation 2032 049

High school, tablet in east concrete foundation wall of vestibule at main entrance, 2 feet from southeast corner, 3 inches below brickwork and directly beneath north end of corner stone No. 827-C. Elevation 2030 264.

Alexandra public school, in dressed stone foundation of projecting portion of south or front wall, 11 inches from southeast corner of projection and 5 feet 9 inches below brickwork, bolt set horizontally, facing east. No. L-35. Elevation 2023 567.

Iron pipe filled with concrete,  $2\frac{1}{2}$  miles west of station and midway between fifteenth and sixteenth poles east of mile post 4, 610 feet westerly from road allowance along east boundary of sec 34-30-7 and 3 feet north of southerly limit of right of way, bolt set vertically. No. L-34. Elevation 2043 866.

**Veteran; C.P.Ry** Water tank, in easterly concrete footing of face containing the spout, 5 inches from northwest edge and 4 inches from northeast edge of footing, bolt set vertically No Z-32 Elevation 2615 902

Concrete bench-mark pier  $3\frac{1}{2}$  miles northwest of station and at milepost 104 2 from Kerrobert, 21 feet west of a private crossing at ninth pole east of east boundary of sec 22-35-9 and 3 feet north of southerly limit of right of way bolt set vertically No Z-31 Elevation 2622 010

**Viking; C N Ry** Public school, in southwest or front concrete foundation wall, 14 inches from southerly corner and 3 feet 7 inches below brickwork, bolt set horizontally No. 43-H. Elevation 2259 247

**Vina; C N Ry** Concrete bench-mark pier  $3\frac{1}{2}$  miles east of station and 10 feet east of seventh pole east of mile post 93 from St. Paul Junction, 2,850 feet westerly from road allowance along east boundary of sec 26-59-13 and 3 feet north of southerly limit of right of way, bolt set vertically No. DD-18. Elevation 2101 483

Concrete bench-mark pier  $\frac{1}{2}$  mile west of station and 12 feet west of ninth pole east of mile post 89 from St. Paul Junction, 2,112 feet westerly from road allowance along east boundary of sec 19-59-13 and 4 feet south of northerly limit of right of way, bolt set vertically No DD-17 Elevation 2197 578.

Concrete bench-mark pier, 4 miles west of station and 50 feet east of mile post 86 from St. Paul Junction, 92 feet east of a private crossing, 1,040 feet easterly from road allowance along north boundary of sec 22-59-14 and 2 feet south of northerly limit of right of way, bolt set vertically No. DD-16 Elevation 2184 055.

**Vulcan; C P Ry** Station in southwest or rear concrete foundation wall, 15 feet from southerly corner, 22 inches below woodwork and underneath platform at entrance to station agent's quarters, bolt set horizontally. No. 68-D. Elevation 3440 303.

Canadian Bank of Commerce, in concrete foundation of southwest side wall, 4 feet from westerly corner and 9 inches below woodwork, bolt set horizontally No 69-D Elevation 3452 066

Concrete bench-mark pier, 5 miles northwest of station and 70 feet west of ninth pole west of mile post 54 from Kipp, 230 feet west of a trestle, 2,180 feet westerly from road allowance along east boundary of sec 15-17-25 and 6 feet north of southerly limit of right of way, bolt set horizontally in north side of pier No. 67-D. Elevation 3345 773

**Wabunan; C N Ry** Wabunan hotel (vacant in 1926), immediately north-east of station, in east concrete foundation wall, 8 inches from southeast corner and 3 feet below woodwork, bolt set horizontally No. 69-H Elevation 2398 229.

**Wainwright; C N Ry** Fundamental bench mark at southerly corner of Main street and Fourth avenue, 6 feet southeast of southeast limit of Main street and 5 feet southwest of southwest limit of Fourth avenue, tablet in top of pier. No. 824-C. Elevation 2221 064

Memorial clock tower, at centre of intersection of Main street and Second avenue, tablet in tread of lower step of concrete base of tower, opposite centre of southeast wall No. 825-C Elevation 2224 379.

Public school, in southwest or front concrete foundation wall, 18 inches from westerly corner and 23 inches below brickwork, bolt set horizontally. No. 36-H Elevation 2237 068.

**Walsh; C.P.Ry.** Bridge over Mackay creek,  $\frac{1}{2}$  mile west of station, in south end of east face of west concrete abutment, 4 feet above bridge seat, bolt set horizontally No. 155-C. Elevation 2441 485.

Open culvert,  $2\frac{1}{2}$  miles northeast of station and at mileage 112 8 from Swift Current, in south end of northeast face of west concrete abutment, 6 inches below bridge seat, bolt set horizontally No. 154-C. Elevation 2420 933

Plate girder bridge,  $3\frac{1}{2}$  miles northeast of station and at mileage 111 9 from Swift Current, in south end of southwest or rear face of west concrete abutment 6 inches below top, bolt set horizontally No. 153-C. Elevation 2419 878.

Double concrete culvert, 1 mile northeast of Cummings, Sask. and at mileage 108 4 from Swift Current, in southeast face of central wall, 10 inches below top, bolt set horizontally No. 152-C. Elevation 2391 781

**Warner; C.P.Ry.** Public school, in concrete foundation of south side wall, 15 feet 6 inches from southwest corner and 7 inches below brickwork, bolt set horizontally No. 210-C. Elevation 3327 991.

First Evangelical church, in concrete foundation of south side wall, 9 feet 7 inches from southeast corner and 15 inches below woodwork, bolt set horizontally No. 209-C. Elevation 3319 533.

**Warner; N.A.Ry.** Concrete bench-mark pier, 3 miles north of north switch and 63 feet south of fourth pole north of mile post 244 from Carbondale, at a small shallow cut at the south end of a shallow fill and 54 feet west of track, bolt set vertically No. V-67. Elevation 1706 606.

Concrete bench-mark pier, 1 mile south of south switch and 48 feet south of eighth pole south of mile post 240 from Carbondale, 345 feet north of south mile-sign, 30 feet northerly from north boundary of sec. 13-23-6 and 52 feet west of track, bolt set vertically No. V-66. Elevation 1767 523.

**Warapite; C.N.Ry.** Concrete bench-mark pier,  $3\frac{1}{2}$  miles west of station and 2 feet west of fifth pole west of mile post 54 from St. Paul Junction, 1,510 feet easterly from road allowance along east boundary of sec. 12-59-19 and 3 feet south of northerly limit of right of way, bolt set vertically. No. DD-6. Elevation 2117 305

**Waskatenau; C.N.Ry.** Concrete bench-mark pier,  $\frac{1}{2}$  mile east of station, 726 feet east of bridge over Waskatenau creek, 420 feet westerly from road allowance along east boundary of sec. 9-59-19 and 3 feet north of southerly limit of right of way, bolt set vertically No. DD-5. Elevation 2084 478.

**Waterways; N.A.Ry.** See Draper, B.M. No. V-78.

**Watts; C.N.Ry.** Concrete bench-mark pier,  $1\frac{1}{2}$  miles east of station and 11 feet east of ninth pole east of mile post 8 from Hanna, 665 feet east of bridge over Bullpound creek, 2,970 feet easterly from road allowance along east boundary of sec. 16-31-15 and 2 feet south of northerly limit of right of way, tablet in top of pier No. B-114. Elevation 2708 279.

Concrete bench-mark pier, 2 miles west of station and at fourth pole east of mile post 10 from Hanna, 406 feet east of a private crossing, 2,265 feet westerly from road allowance along east boundary of sec. 13-31-16 and 2 feet north of southerly limit of right of way, tablet in top of pier. No. B-115. Elevation 2753 480.

**Wayne; C N Ry** Concrete bench-mark pier,  $2\frac{1}{2}$  miles southwest of station and 245 feet west of mile post 53 from Hagna, 100 feet east of a curved cut, 472 feet east of a trestle over Rosebud river and 2 feet north of southerly limit of right of way, tablet in top of pier. No. 8-136 Elevation 2320 511.

**Westlock; N.A.Ry** Concrete bench mark pier, 2 miles north of station and 63 feet north of seventh pole north of mile post 54 from junction with C.N.Ry., 425 feet northerly from road allowance along north boundary of sec. 9-60-26 and 3 feet east of westerly limit of right of way, bolt set vertically. No. U-15. Elevation 2089 474.

Concrete bench-mark pier,  $1\frac{1}{2}$  miles southwest of station and 80 feet north of eleventh pole north of mile post 50 from junction with C N Ry., 630 feet north of bridge at mileage 50 3,  $\frac{1}{2}$  mile northerly from east boundary of sec. 30-59-26 and 3 feet east of westerly limit of right of way, bolt set vertically. No. U-14. Elevation 2143-928.

**Wetaskiwin; C.P.Ry** Post office in south or front stone foundation wall, midway between westerly entrance and letter-drop and 2 feet 8 inches below brickwork, bolt set horizontally No. 679-C Elevation 2497 434

Court house, in north or front stone foundation wall, 12 feet from northwest corner and 4 feet below brickwork, bolt set horizontally. No. 680-C. Elevation 2493 452.

Bank of Montreal, in south or front stone foundation wall, 2 feet from southwest corner and 2 feet 4 inches below brickwork bolt set horizontally No. H-42. Elevation 2497 262.

Concrete bench-mark pier, 2 miles north of station and 35 feet south of sixth pole north of mile post 59 from Red Deer, 100 feet northerly from road allowance along east boundary of sec. 27-46-24 and 5 feet west of easterly limit of right of way, bolt set vertically No. 681-C Elevation 2496 969

Concrete bench-mark pier, 4 miles northeast of station and at mileage 91.3 from Hardisty, 200 feet easterly from road allowance along east boundary of sec. 29-46-23 and 3 feet south of northerly limit of right of way, bolt set vertically No. 678-C Elevation 2458 168.

Concrete bench-mark pier,  $4\frac{1}{2}$  miles south of station and 42 feet south of fifteenth pole north of mile post 52 from Red Deer or thirteenth pole north of road allowance along north boundary of sec. 22-45-24, 3 feet east of westerly limit of right of way, bolt set vertically No. H-41. Elevation 2506 518.

**Whitla; C P Ry** Large boulder, 2 miles west of station and 200 feet east of mile post 27 from Dunsmore, 400 feet westerly from a road crossing and 180 feet south of southerly limit of right of way, in centre of west face of boulder, 6 inches above ground, bolt set horizontally No. 175-C. Elevation 2762 900.

**Wilson; C P Ry** Concrete bench-mark pier,  $\frac{1}{2}$  mile northwest of station and 18 feet north of third pole north of mile post 93 from Manyberries or seventeenth pole south of road allowance along north boundary of sec. 23-7-20, 5 feet east of westerly limit of right of way, bolt set horizontally in side of pier No. 201-C Elevation 3046 599.

**Winnifred; C P Ry** Oddfellow's hall, a frame building about 800 feet west and 300 feet north of the station, in west concrete foundation wall, 6 feet from southwest corner and 16 inches below woodwork; bolt set horizontally. No. 176-C. Elevation 2724-223.



Concrete bench-mark pier,  $1\frac{1}{2}$  miles west of station and 560 feet west of mile post 34 from Dunmore, 4 feet north of southerly limit of right of way; bolt set horizontally in north side of pier. No. 177-C. Elevation 2887-885.

**Woodhouse;** C.P.Ry. N. Bawlf Grain Company's elevator, in south concrete foundation wall, 2 feet from southeast corner and 4 inches below woodwork; bolt set horizontally No. CC-15. Elevation 3266 394

Schoolhouse (Hoosier School District No. 1677), on southwest  $\frac{1}{2}$  sec. 8-12-26,  $1\frac{1}{2}$  miles north of station and 210 feet east of railway, in north concrete foundation wall, 4 feet 10 inches from northwest corner and 3 inches below woodwork, bolt set horizontally No. CC-14. Elevation 3292 023

**Wolf Creek;** C.N.Ry. See Yates, B.M. No. 80-H.

**Yates;** C.N.Ry. Steel trestle bridge over McLeod river,  $1\frac{1}{2}$  miles east of station, in south end of east face of west concrete abutment, 6 feet 5 inches above bridge seat; bolt set horizontally No. 80-H. Elevation 2874 859.

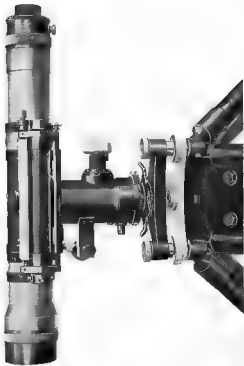
**Yelger;** C.N.Ry. See Ryley, B.M. No. 48-H.

**Youngstown;** C.N.Ry. Concrete bench mark pier, 1 mile northwest of station and 13 feet east of tenth pole west of mile post 103 from Kindersley, 113 feet east of a private crossing, 915 feet westerly from road allowance along east boundary of sec. 5-30-9 and 1 foot south of northerly limit of right of way, tablet in top of pier. No. S-90. Elevation 2321 037

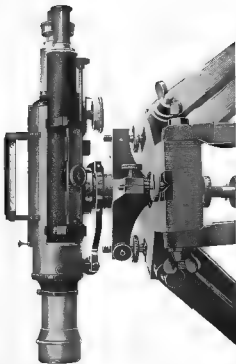




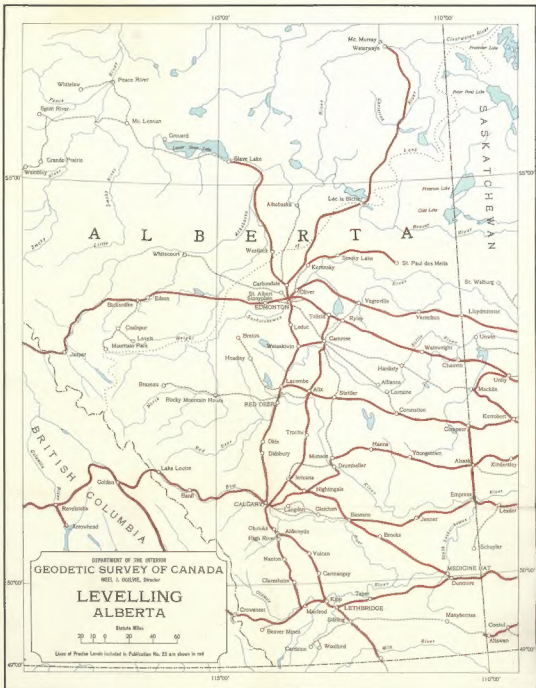




Pneumatic Level—Zanon Filters.



Poggendorff Level United States Coast and Geodetic Survey Pattern.



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